# Available Pharmaceutical Products

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December 2011

AVAILABLE PHARMACEUTICAL PRODUCTS

This report is a periodic compilation of pharmaceutical products that are currently in licensing processes or where actual or potential M&A discussions are taking place. We have divided opportunities by therapeutic area. Items involving public companies are only listed where it is broadly understood that a licensing / sale process is underway or where a product that is an excellent candidate for outlicensing is available but no known active process is underway. This list is distributed to individuals with an interest in business development in the pharmaceutical industry. Occasionally, we include products where the owner has asked that their identity remain undisclosed. In most cases Torreya Partners can make an introduction to a party noted as “undisclosed”.

To assist you, we highlight listings with the following tags:

**NEW** items flagged are new since the last listing of products.

**UPDATE** denotes a change on an existing listing.

**COMPLETED** denotes that a transaction was completed on a previously listed available product.

**H** High interest or likely to end up as a large deal. An indicator of one of the higher quality available assets.

$ items denote marketed products

In many cases we also provide a web link to relevant information about a compound or company noted by (Link) or, alternatively contact information (Contact) or a non-confidential presentation (Noncon).

Torreya Partners is pleased to be collaborating with Deloitte Recap which offers comprehensive Biopharma alliance information, deal values, and drug development histories to support the development of alliance and clinical development strategies. You will find some references to Deloitte Recap material and products in this report.

**ACTIVE COMPANY TAKEOVER SITUATIONS**

**NEW** Abdi Ibrahim Ilac - largest Turkey drug maker with revenues over $800mm. Reported in May 2011 that was in discussions to sell a strategic stake.

**UPDATE** Actelion - has received takeover approaches from several strategic bidders according to the Wall Street Journal (10/7/2010). Activist shareholder in Elliott pushed for a change of control transaction. Wall Street Journal Sep 28, 2011: “Elliott Advisors Cuts Actelion Stake in Wake of Control Battle”. Elliott failed to put its own directors on Board and JP Garnier, formerly CEO of GSK, recently became Chairman. A takeover of Actelion appears to be quite unlikely in light of these events.

Acusphere - Imagify, pending EMA filing for approval of this cardiac imaging agent. Differentiated from SPECT agents on the market insofar as permits evaluating of myocardial perfusion, an important marker of coronary artery disease (CAD) without radioactive markers. Potential first-to-market drug in $600 million and $2 billion addressable market in E.U. and U.S. respectively. Recent SPA from FDA defines design of final U.S. trial needed for approval. Company is assisted by Torreya Partners. For details contact peter.garrambone@torreyapartners.com (Link)

**UPDATE** Akebia - Positive Phase 2 with a HIF modulator for the treatment of anemia. Originally developed at P&G Pharma. Open to a licensing deal in but could consider other possibilities including a change of control. Company expects to report a second Phase 2 trial dataset in March 2012. (Link)
UPDATE Allos Therapeutics - Oncology marketer with Folotyn® for liquid tumors. After a recently failed merger attempt with AMAG, Allos is rumored to be continuing to explore strategic alternatives with the assistance of JP Morgan. [Link]

UPDATE $ AMAG - Feraheme IV iron product - Recently approved. Company is commercializing on its own. AMAG’s recent merger attempt with Allos was ended in November 2011. On Nov 17, 2011, AMAG announced that it had hired Jefferies to explore all opportunities to enhance shareholder value. Frank Thomas, interim CEO of AMAG indicated: “We will expeditiously complete this process, which will include a parallel review of a potential sale of the company and other strategic merger and acquisition transactions.”

UPDATE Amarin - Developing a pure omega-3 for reduction of triglycerides. Phase 3 data reported out very strong. Company has indicated that it has retained a financial advisor (Lazard) to explore a sale. Update: Nov 2011 - no sale reported and company’s valuation has dropped from over $2bn to under $1bn. Amarin recently filed an NDA for its lead product. Amarin appears to be a likely takeover candidate for the next year. [Link]

Amoun Pharmaceutical - An Egyptian company that manufactures off-patent branded generic formulations. It is one of the largest pharmaceutical companies in Egypt. It sells over 135 human products in over 275 forms. Of these products, 33 occupy the top 2 positions in their respective therapeutic categories and subcategories. Open to a company sale or strategic stake purchase. Reuters - Dec 6, 2010: “CVCI is also preparing to sell Amoun, one of Egypt’s biggest drugmakers, people familiar with the matter told Reuters on Oct. 20. It owns Amoun with two other co-investors.” Bloomberg reported in Feb 2011 that the company has been looking for $1 billion in a sale price but that political upheaval in Egypt has hindered the sale.

COMPLETED Anadys - ANA598 is a low-nanomolar inhibitor of HCV genotype 1a and 1b replicons via N5b polymerase. Has started a Phase 2 trial. Anadys also has ANA773, an oral inducer of endogenous interferons with nice Phase 1 data. May 2010 - Lazard retained to act as advisor to Anadys to explore strategic alternatives. Nov 2010 press release: Anadys continues to work with Lazard Frères & Co. LLC. to explore potential strategic transactions, in parallel with moving the ANA598 and ANA773 programs forward. Update: Oct 17, 2011 - Roche acquires Anadys for $230mm - a 256% premium.

UPDATE $ Avanir - Launched Neudexta for the treatment of pseudobulbar effect and, potentially, other indications. Positive data and good patent picture. Widely rumored to be an M&A candidate. $5.7 million in revenue in first year of launch (soft numbers). Market cap of $248 million as of November 2011. EMA application recently accepted.

COMPLETED $ Azur Pharma has hired Lazard to advise on funding options including a potential stake sale according to the Sunday Times on May 22, 2011. Company has a solid franchise as a marketer of drugs in the CNS and women’s health areas. A company sale could be possible. Update: Sep 19, 2011 - Jazz Pharma merges with Azur Pharma as an Ireland domiciled company with former Jazz shareholders taking 80% of the combined company. A transaction closing is expected in Q1 2012.

UPDATE Biofarma - Biofarma for sale via JP Morgan. Reuters (12/6/2010): Citigroup’s (C.N) venture capital arm and two co-investors have begun an auction of Turkish copycat drugmaker Biofarma, three people familiar with the matter said, in what could be Turkey's biggest healthcare deal.” Update: A number of parties rumored to have looked at this asset but price ask was seen as prohibitive. As of Nov 2011 no sale had taken place.

UPDATE Biota - Developing a once weekly inhalable long-acting neuraminidase inhibitors for the treatment of flu. Would compete against Relenza from GSK. Currently partnered with Daichi-Sankyo in Japan. Received a large BARDA grant in Q2 2011 and has retained Piper Jaffray as financial advisor to maximize value of existing programs and help to enter the U.S. market on a commercial basis. No transaction announced as of December 2011. [Link]
China Nuokang - its lead products include Baquting for bleeding control, Aiduo, a cardiovascular stress imaging agent, and Aiwen, an anti-arrhythmic agent. The company has a value of $180mm. Biopharm Insight in November reported that this company hired Lazard for a sale process.

Claris Life Sciences - Indian injectibles company has hired Rothschild to look at strategic options. Company has a rich pipeline of hospital generic injectibles using novel delivery methods. (Link)

Covidien Pharmaceuticals - According to the New York Times on June 7, 2011 “Covidien, the health care company spun out from Tyco four years ago, may seek to sell its pharmaceutical unit...” This division of Covidien (formerly Mallinckrodt) has a major business selling pain products (both branded and generics) and imaging products. Revenues are around $2 billion. Update: As of December 2011 no sale has taken place. Company is rumored to be interested in a sale of the whole business (rather than pieces) for a full price. YE 2011 numbers reported on Nov 15, 2011 and were robust (sales up 9% yoy) with strong performance in generics.

Exelixis - According to Bloomberg on April 12, 2011: “Exelixis Inc. is working with Goldman Sachs Group Inc. to prepare for potential takeover offers after its experimental drug helped prostate-cancer patients in a study.” Company’s XL-184 has reported dramatic data on reducing metastatic prostate lesions at ASCO. Update: company has hired a Chief Commercialization Officer with intention to introduce cabozantinib to the U.S. market and has reported strong data for cabozantinib in the treatment of medullary thyroid cancer.

Gen-Probe - Widely rumored to be for sale with interest from Novartis. Well known diagnostics company. Process well underway but company viewed as expensive. Update: Wall Street journal reports on July 20, 2011 that “Novartis is no longer actively pursuing U.S. medical diagnostic-testing company Gen-Probe, meaning Gen-Probe could end its sales process...”

GlaxoSmithKline - running a process to divest non-core OTC brands with assistance from Goldman Sachs. The products to be divested, which are primarily sold in Europe and the United States, had sales in 2010 of approximately £500 million, 10% of GSK’s total Consumer Healthcare turnover. They include analgesics: Solpadeine, BC and Goody’s; vitamin and supplement product Abtei; feminine hygiene treatment Lactacyd; and alli for weight management. Reuters Update on Nov 14, 2011: “GlaxoSmithKline is assessing final bids for a clutch of its non-prescription drugs, keeping the process on track for the selection of a buyer by the end of the year, people familiar with the matter said on Monday.” (Link)

Graceway - Could consider sale of products from 3M and has hired Lazard to explore alternatives through an ongoing process. Aldara for acitinic keratosis a key seller but was recently genericized. Update: Nov 23, 2011 - Medicis acquired Graceway for $455mm after the company filed for Chapter 11 bankruptcy on Sep 29, 2011.

Guangxi Golden Throat (Guang Xi Jin Sang Zi), a privately held manufacturer of healthcare products, is reportedly in sale talks. The company has annual revenues of around $47mm from its throat lozenges, which sell under the 'Golden Throat' brandname.

Hi-Tech Pharmacal - Market rumors in April 2011 that company could be purchased. As of December 2011 no transaction had taken place of this manufacturing company of generic liquids and ointments. The company has delivered strong earnings throughout 2011 and is trading at close to twice the price in Dec 2011 it had earlier in 2011.


Ipsen - Completed a strategic review in 2011 with the theme of increasing focus and growing the footprint. The implications of this for potential partnerships or asset divestitures are threefold: (1) Ipsen looking for a partner
in the French primary care arena, (2) Ipsen looking to find a buyer for its industrial site in Dreux France which makes solid dose and liquid formulations and (3) "Ipsen will explore all options to maximize value (of its short stature franchise) while meeting its obligations to patients and partners. It will be managed directly by regions and countries." Update: Ipsen sold off the rights to Apokyn in the U.S. for over 1X revenues on Nov 2, 2011.

**COMPLETED** Labopharm - Company has retained a financial advisor and is actively looking at alternatives. Press Release (4/29/2011): “The Board and management are currently engaged in reviewing the Company’s technologies, products and product candidates to determine the appropriate path forward for each of its assets, including consideration of opportunities to monetize the Company’s approved products. Labopharm believes that its INTELLITAB(TM) and POLYMERIC NANO-DELIVERY SYSTEMS(TM) (PNDS(TM)) technology platforms could have potential in their respective fields of application and are evaluating strategies to capitalize on these assets. As part of the strategic review process, Labopharm is also exploring potential business combinations that could create value for shareholders.” Update: Labopharm acquired by Paladin Labs for $20mm on August 17, 2011.

$L$ Lipose - Viafill fat transfer system on the market with applications in aesthetics where traditional volumizers are not well suited - particularly for the face and breasts. Company assisted by Torreya Partners. For details contact john.bradley@torreyapartners.com.

**UPDATE** $Medicure - May sell U.S. rights to Aggrastat, originally a Merck drug, for acute cardiac indications. Update: company restructured its liabilities on July 18, 2011 in order to reduce debt. Beal Advisors will be working with the company to find a partner or buyer for Aggrastat going forward. Revenues are currently at a run rate of $3mm a year. ([Link])

Meda - A *Wall Street Journal* Report on July 27, 2011 indicated that Valeant had approached Meda about a takeover offer. Meda responded indicating that its board of directors had not received an approach of the kind reported in the W SJ.

Merlion - Developing finafloxacin, a best in class 4th generation fluoroquinolone being targeted against severe, life-threatening infections. Compound has successfully progressed through to mid-stage clinical development. Oral formulation demonstrated in PoC studies compelling efficacy in uncomplicated UTI and the eradication of *Helicobacter pylori*. IV formulation currently completing Phase I trials and Phase 2 studies in complicated UTI are planned, as are clinical protocols in complicated respiratory tract infections. MerLion are exploring strategic alternatives for this product with the assistance of Torreya Partners. For further details, contact Rodolphe.grepinet@torreyapartners.com. ([Link])

Mimetica - Has developed MTC896 as a topical gel for the treatment of excessive sebum production in subjects with acne and other skin conditions. MTC896 is a highly selective and potent antagonist (<10 nM) of the Melanocortin-5 Receptor (MC5R). There are currently no other approved topical products available on the market for the treatment of excessive sebum production. The company hired William Blair in October 2010 to seek a company sale. Update: no sale as of December 2011. ([Link])

**NEW** Mustafa Nevzat - Turkish generic pharmaceutical maker with revenues of approximately $250mm. According to Bloomberg, in talks to sell a strategic stake.

**UPDATE** Newron - has failed with ralfinamide in Phase 3 for lower back pain. Market cap around $45mm. Has a solid pipeline of CNS candidates. Open to an M&A deal. Update: Had announced a merger with BioTie which was terminated on Oct 28, 2011. Company looking for alternatives.

**NEW** Omega Pharma - Cuckininvest, the largest investor, of this Belgian company, has offered a premium to purchase the remaining part of the company it does not own. KBC is advising the board of directors. Omega sells OTC medicines in Europe.
Onyx - rumored to be exploring strategic alternatives. Substantial value potential tied to a recently filed NDA for carfilzomib, a protease inhibitor, for the treatment of liquid tumors including multiple myeloma. Bloomberg reported on Nov 30, 2011 that Onyx is working with Centerview as a financial advisor. On Dec 12, FDA indicated that an accelerated review would not take place.

Par Pharmaceuticals - Relational Investors filed a 13D showing 8.7% ownership of this company on November 25, 2011. In the 13D Relational indicated: “Despite these opportunities for improvement, the Reporting Persons believe that the Company may continue to trade at discounted prices because of industry challenges and the Company’s sub-optimal size and product scope. If the discount persists, the Reporting Persons believe that, in keeping with sound stewardship principles, the Company’s board will be required to consider broad strategic alternatives. Specifically, the Reporting Persons are confident that substantial cost savings could be achieved in a transaction with a strategic buyer.” Note: there is no evidence that Par Pharmaceuticals has received offers or is open to receiving such offers at present.

Pernix / SEEK Joint Venture - Looking to sell the rights to Theobromine for the treatment of cough with assistance of JP Morgan. Manfred Scheske, Chief Executive Officer of the SEEK/Pernix joint venture, commented: “We believe theobromine (BC1036) is a late-stage, low-risk asset and will be the first new treatment for cough in over 50 years.” Going into a Phase 3 clinical trial. As of November 2011, Pernix indicated: “Joint venture continues to evaluate opportunities and expects to continue discussions with interested parties to maximize the value of the Theobromine asset.”

Pfizer - has announced that it is selling vet medicines and its nutritional business. Both businesses are leaders in their class. Update: process to sell infant nutrition business is rumored to be underway in November 2011. It is believed that the vet medicines business is most likely to be spun out.

Qualicaps - owned by Carlyle. Maker of gelcaps (like Capsugel) is up for auction. UBS is rumored to be sellside advisor on business with approx. $350mm in EBITDA. As of June 2011 no sale had taken place.

Rottapharm - for sale according to the Wall Street Journal. Company has two Phase 3 drugs in development and a strong group of branded products in the market. Revenues over $850 million. Sale price could be over $2.5 billion. Company rumored to be using Credit Suisse to find a buyer.

S*Bio - In June, 2011 announced results from multiple Phase I/II clinical studies of JAK2 inhibitor SB1518 which confirmed safety and efficacy. S*Bio has received the rights back to this program from Onyx Pharma. Has promising data on a Phase 1 HDAC inhibitor.

San Raffaele del Monte Tabor - privately-held Italian pharmaceutical company, is soliciting offers other than the EUR 350m binding offer from Vatican bank IOR and Italian entrepreneur Vittoria Malacalza, according to Il Sole 24 on Dec 2, 2011.

Savient Pharmaceuticals - FDA approved KRYSTEXXA (pegloticase) in Sep 2010, a PEGylated uric acid specific enzyme indicated for the treatment of chronic gout in adult patients refractory to conventional therapy. Company is seeking a commercial buyer and is using JP Morgan and Lazard in its search for an acquisition partner. Savient is now pursuing a launch of Krystexxa on its own and is building a 50-person plus sales force. Update: First year sales were $2.6 million. Market Cap of $160mm. (Link)

$ Shunfeng Pharmaceutica - Chinese topical skin care drug manufacturer is exploring a sale. Revenues around $35mm.

Sigma-Tau - Reuters (6/2/11): “Italy’s Sigma-Tau is eyeing the sale of up to 49 percent in the family-owned drugmaker to private equity, ahead of a possible IPO that could value it at more than $2 billion,” people familiar with the situation said.” Company has approximately €1bn revenue with a strong rare disease business and a well
established European brand business. It is believed that discussions regarding a stake sale are no longer active but rather the company is focused on restructuring its Italian business.

**COMPLETED** Surmodics - Reuters, Dec 14, 2010: “SurModics Inc said it will pursue strategic alternatives for its pharmaceutical business, including a potential sale, to focus on its medical-device and in vitro diagnostics businesses. SurModics, which specializes in drug delivery technology, has come under investor fire due to underperformance of its pharmaceutical business. The company said it retained Piper Jaffray & Co as its financial adviser for the review.” Company under pressure from Ramius. Update: As of June 2011 no sale had taken place. Nov 17: company sells pharmaceutical assets to Evonik Industries for $30mm in cash.

**UPDATE** Thrombogenics - completed Phase 3 studies for Microplasmin in Phase 3 clinical development for the non-surgical treatment of back of the eye diseases. Good evidence of efficacy with two positive Phase 3 trials reported. Expected to be on market by end of 2012. Would consider a sale. ([Link](#))

Undisclosed player - selling off $20mm revenue+ commercial product for narrow market with pediatric applications.

**NEW** Undisclosed player - player in drug delivery is searching for a merger or sale with assistance of a financial advisor. Company has expertise in both injectibles and controlled release solid dose. Substantial royalties and partnerships deals signed. Annualized revenue > $40mm.

Undisclosed player - open to a merger or sale of $35mm revenue company with commercial presence in the U.S. pain market. Torreya Partners advising.

$ Undisclosed player - process well underway for sale of company with a marketed but not promoted cardiovascular product with 2011 revenues around $9 million.

**NEW** Undisclosed Player - U.S. generic company with approximately $90mm in gross revenue is searching for a buyer with the assistance of a financial advisor. Company has substantial presence in medicines for cough & cold, womens health and pediatrics.

**NEW** Undisclosed - division of larger pharmaceutical company with approximately $30mm revenues in oncology product sales. Active sale process underway.

**NEW** Undisclosed - German vertically integrated marketer of generic and branded pharma products with strength in cardiovascular, dental and veterinary medicines. Revenues of this company exceed €100mm.

**NEW** Undisclosed - Chinese specialty pharmaceutical company with strength in anti-infectives. Good EBITDA and revenue over $70mm in 2011. Torreya Partners assisting in sale of majority stake. For details please contact rodolphe.grepinet@torreyapartners.com.

**NEW** Undisclosed player - Division of Indian generic company that is focused on oral solid dose preparations is for sale. Revenues over $300mm. Company has strength in formulation work and manufacturing. Ships product to numerous global locations.

**NEW** Undisclosed Player - U.S. generic company with more than $100 million in revenues is for sale. Company has a significant branded business and a manufacturing facility.

**NEW** Undisclosed Player - U.S. generic company with more than $40 million in revenues is for sale via Torreya Partners. Company has a significant pipeline, high growth and a fully developed operating platform. For details please contact tom.babich@torreyapartners.com.
Undisclosed player - U.S. generic player with approximately $200mm in net revenues and strength in drug delivery solutions would consider a company sale. Update: Par acquires Anchen Pharmaceuticals for $410mm in cash on Aug 24, 2011.

Undisclosed player - dermatology company with more than $40mm in revenue has hired a financial advisor to restructure its debt that likely exceeds intrinsic value of assets.

Undisclosed player - Large pan-Asian drug company open to a sale. Update: Menarini acquires Invida Group on Nov 16, 2011. Price not announced but Invida a substantial business with more than $200mm in revenue.

Wockhardt - rumored to be in a process to sell its substantial nutrition business as part of a process to pay down external debt.

**ADDITION MANAGEMENT**

Alkermes - ALKS-33, a unique opioid receptor profile with strong efficacy data demonstrating rapid onset and extended activity beyond 24 hours. Broad applicability including treatment for reward/impulse control disorders. Multiple clinical studies conducted including Phase 2 for alcohol dependence. Interest in partners for rights outside of North America.

BioDelivery Sciences - developing BEMA Buprenorphine/Naloxone for the treatment of opioid dependence. The product will combine a "high dose" of buprenorphine along with an abuse deterrent agent, naloxone. Phase 3 studies underway. BDSI recently started PK study of this product compared to Suboxone. (Link)

Camurus - CAM2038 is a long-acting injectable buprenorphine in development for treatment of opiate addiction. A Phase 2a has recently been completed with positive data. Similar program at Titan Pharma.

Catalyst Pharmaceutical Partners - Is evaluating its lead Phase 1 product and first-in-class GABA aminotransferase inhibitor candidate, CPP-109 (vigabatrin), for the treatment of cocaine addiction.

Embera NeuroTherapeutics - developing EMB-001 which is designed to reduce craving for addictive substances. The product is a combination of oxazepam and metyrapone. In Phase 1 studies. Shown to be more effective in reducing craving than Chantix® in animal studies. (Link)

Medicinova - has reported positive efficacy data on ibudilast for the treatment of opioid withdrawal. Has finished Phase 2 studies in another indication.

Omeros - in Phase 2 studies for a PPARgamma agonist for the treatment of addiction to prescription opioids. Open to partnering this program. (Link)

Orexo - OX219, buprenorphine, a partial opiate agonist, for managing heroin addiction. Has finished Phase 1 studies. Orexo looking for a Japanese partner. (Link)

Psyadon Pharma - in a Phase 2 clinical study of ecopipam for pathological gambling.

Titan Pharmaceuticals - Probuphine is a novel, subcutaneous implant formulation of buprenorphine designed to deliver six months of medication following a single treatment. This product has demonstrated strong positive results in a controlled Phase 3 study for the treatment of opioid addiction and an NDA filing is in preparation. (Link)
Benchmark Data for Monoclonal Antibodies

Two recent reports from Deloitte Recap provide unique benchmarks on monoclonal antibody deals:

“What’s the Deal with Monoclonal Antibodies?” analyzes three key drivers of deal value for mAbs; technology type, therapeutic area, and stage of development and addresses:

- What is the average upfront payment, deal size, and royalty rate for an antibody technology license?

- Which therapeutic areas garner the highest upfront payments for mAb deals?

- What is the average upfront payment for preclinical, Phase I, Phase II, and Phase III antibody deals?

“Therapeutic Monoclonal Antibodies - Insights, Strategies and Data” analyzes metrics for therapeutic monoclonal antibodies, both marketed and in the clinical pipeline, and examines strategies used by successful mAb companies and addresses:

- What are the top therapeutic and molecular targets of mAbs in the pipeline?

- Which therapeutic areas do mAbs have greatest chances of success for transitioning from Phase I to Market?

- What is the probability of success for mAbs by therapeutic area?

- When and why do most mAbs terminate during development?
Ablynx - Has positive Phase 1b safety and efficacy data for a “nanobody” targeting RANK-L (compare to Amgen’s Prolia®). Dataset presented at EULAR in May 2011. ([Link]

Ablynx - **ALX-0081** is a Nanobody targeting von Willebrand Factor (vWF), to reduce the risk of thrombosis in patients with acute coronary syndrome (ACS) and thrombotic thrombocytopenic purpura (TTP). In a Phase 2 study.

**NEW** Ablynx - reported on November 5, 2011 that it regained rights ATN-103 a Phase 2 nanobody treatment for rheumatoid arthritis based on TNF-alpha modulation. Ablynx may develop this program further itself or partner out. ([Link]

Access Pharmaceuticals - Searching for a partner an anti-proliferative antibody called Angiolix which targets Lactadherin. This product is in the pre-clinical stage of development. ([Link]

ADIENNE Pharma - Begedina is a new murine monoclonal antibody directed against CD26 antigens, expressed on a small portion of CD4 T lymphocytes produced by haematopoietic progenitor cells. Begedina is being developed for the treatment of Graft Versus Host Disease. Promising Phase 2 data reported.

Affimed - Taking AFM13, with a novel tetravalent bispecific antibody structure, for the treatment of Hodgkin’s disease (HD) through Phase 1 studies. No approved treatments on market. Partnership discussions underway.

**NEW** Alder Biopharmaceuticals - Phase 2 data from ALD518 investigational antibody therapeutic that targets interleukin-6 (IL-6) demonstrate a reversal of anemia in patients with advanced non-small cell lung cancer (NSCLC). After 12 weeks of treatment with the anti-inflammatory therapeutic, 58 percent of patients who received ALD518 experienced hemoglobin level increases from less than 11 g/dL to more than 12 g/dL, while no patients receiving placebo experienced this increase. Also saw improvements in lean body mass and reductions in fatigue. Note: this antibody is partnered to BMS for all indications except cancer. ([Link]

Ambrx - very exciting platform technologies which allow engineering of proteins developed in both eukaryotic and prokaryotic cells including an antibody drug conjugate program for oncology. ([Link]

Anaphore - pioneering Altrimers®, a new class of protein therapeutics that has a trivalent structure. Better ability to lock on to a target. Working on a number of targets including a TRAIL-R antibody for oncology that is pre-clinical. ([Link]

Anaphore - ATX3105, blocks the receptor complex engaged by interleukin-23 (IL-23), an immunoregulatory protein that has become a key target in strategies to develop better therapies for autoimmune disorders. This preclinical drug candidate is being prepared for an IND. ([Link]

Apeiron Biologics - In Phase 3 for CH14.18, an antibody, for neuroblastoma. ([Link]

Apogenix - in Phase 2 with APG101, a CD95 antibody, for GBM. ([Link]

Biocon - Would consider a partnership for its anti-CD6 humanized antibody, **T1h**. Has completed a Phase 1 study in RA and has two Phase 2 studies underway.

Biogen Idec - Looking to outlicense Galiximab, an anti-CD80 antibody, which has shown activity in B-cell lymphomas. Has gone through Phase 3 trials. Biogen looking to outlicense after a recent strategic review. ([Link]

Biogen Idec - looking to outlicense **Volociximab**, a chimeric monoclonal antibody that inhibits the functional activity of a5a1 integrin, a protein found on activated endothelial cells. Blocking the activity of a5a1 integrin has been found to prevent angiogenesis. This product is jointly owned with Abbott’s Facet Biotechnology. ([Link)
Biogen Idec - looking to outlicense BIIB015 which consists of Biogen Idec’s Cripto-binding antibody and Immunogen’s DM4 cell-killing agent. BIIB015 advanced into Phase I testing in the summer of 2008. This compound was slated for Phase 2 in 2011 until Biogen Idec decided to exit oncology after a recent strategic review.

Biogen Idec - looking to outlicense an anti IGF1-R antibody for solid tumors. Has progressed into Phase 2 studies. (Link)

Biolnvent - In Phase 2 studies in multiple myeloma with an anti-CD54 antibody. Encouraging Phase 1 data.

Biotecno - CAB051, an anti-HER2 antibody which is nearing readiness for clinical testing.

Biotie - Biotie initiated two clinical studies in rheumatoid arthritis and psoriasis patients with its fully human VAP-1 monoclonal antibody. Phase 1b studies were supportive of efficacy showing improvements in DAS28 versus placebo. (Link)

Cellidex - Their lead antibody-drug conjugate (ADC), CDX-011, is in Phase 2 development for the treatment of locally advanced or metastatic breast cancer (in Phase 2b) and stage 3 or IV melanoma. Saw 15% ORR in melanoma Phase 2a study. CDX-011 targets glycoprotein NMB, also known as osteoactivin, an cell surface protein overexpressed in certain cancers. (Link)

UPDATE Chiome Bioscience - Can develop antibodies against rare and difficult antigens using its ADLib technology. January, 2011 entered into new license agreement for joint invention with RIKEN, which allows Chiome to generate, develop, commercialize, or out license antibodies through preferential use of ADLib system and to license out ADLib for the life of the patent. ADLib system is an innovative technology for preparing antibodies by activating homologous recombination in avian DT40 cells. Update: Chiome successfully went public in Dec 2011.

DSX Therapeutics - Developing a Mab that targets inducible nitric oxide synthase, which is involved in sepsis pathology. Pre-clinical program.

Elusys - Has positive animal data for Anthim, a high-affinity humanized monoclonal antibody targeting the anthrax toxin protective antigen. Recently received a U.S. government contract for up to $143 million. In active strategic discussions. (Link)

Ganymed Pharmaceuticals - Good Phase 1 data with Claudiximab, an iMAB directed against the GC182 target, a gastric differentiation protein that is expressed at the cell surface of 70% of gastric cancers, 50% of pancreatic cancers, 30% of esophageal cancers, and 25% of NSCLC. Now in Phase 2a studies in gastro-esophageal cancer. (Link)

Genesis Pharma - developing a CD-55 antibody against solid tumors. In Preclinical testing. (Link)

Immunogen - Seen as one of the more exciting oncology players in the market. Has an unpartnered antibody drug conjugate that binds to CD56 Lorvotuzumab Mertansine for SCLC, multiple myeloma, MCC, Ovarian Cancer and other CD56+ Solid Tumors. A recent study showed a number of partial responses in the treatment of multiple myeloma. (Link)

Immunomedics - In partnership discussions on the oncology indications for two monoclonal antibodies which are currently in Phase 2 trials (Link)

InNexus - Next generation cancer antibodies at pre-clinical stage. Several highly potent anti-CD20 antibodies in development. Has engaged Dundee Securities to act as financial advisor. (Link)

NEW ISU Abxis - Biosimilar to ReoPro for adjuvant of PCI (Percutaneous Coronary Intervention) procedure. Clotinabl is anti-GPIIb/IIIa monoclonal antibody and Fab Protein which blocks platelet aggregation. On market in 7 countries.
Kenta Biotech - Outlicensing antibodies for HAP and pseudomonas infections, KBPA101 has completed Phase 2a studies and reported 100% survival in hospital-acquired pneumonia.

Morphosys - MOR103 is a fully human HuCAL antibody against GM-CSF that is in Phase 1 studies. Also see a similar antibody in development at Kalobios. (Link)

Mymetics - Has hired Lazard to look at its strategic alternatives. Company developing mucosal antibodies to prevent HIV infection. Phase 1 data show safe and well tolerated. Also has a preclinical RSV vaccine. (Link)

NasVax Ltd. - In a Phase 2a clinical trial in 36 subjects with NASH (Nonalcoholic steatohepatitis) or “fatty liver” and the metabolic syndrome, oral aCD3 antibody immunotherapy was generally very safe and induced positive trends in blood levels of two enzymes that are biomarkers for liver inflammation. (Link)

Novimmune - In Phase 2 with an anti-CD3 antibody for Crohn’s disease. Exploring potential as an immunomodulator in Type 1 diabetes and transplant rejection as well.

Opsona Therapeutics - In preclinical development of an anti-TLR Mab for treatment of inflammatory diseases such as RA and lupus. (Link)

Patrys - developing antibodies for solid tumors. In Phase 1 with PAT-SM6 that binds to GRP78 that is found on the surface of cancer cells but not on the surface of healthy tissues. Also in Phase 1 with PAT-SC1 that binds to CD-55. (also see Genesis Pharma). (Link)

UPDATE Peregrine Pharma - Positive data in a single arm Phase 2a trial evaluating Bavituximab in combination with carboplatin and paclitaxel in advanced breast cancer patients. Is currently in two phase 2b trials in NSCLC. Reported 12.4 month overall survival data from Phase 2 trial in non-small cell lung cancer in June, 2011. Would discuss partnership of this antibody outside of the U.S. - particularly after Phase 2 NSCLC data arrive in Q1 2012. (Link)

NEW Philogen - L19-IL2 is well tolerated in patients and is being clinically developed in two registrational clinical trials in patients with metastatic melanoma. In addition, L19-IL2 is being studied in combination with gemcitabine in patients with pancreatic cancer.

NEW Progenics - looking to outlicense its virology pipeline. Included is PRO-140, a Phase 2 antibody for HIV. Unlike small-molecule CCR5 antagonists, PRO 140 inhibits HIV entry at concentrations that in vitro do not appear to block CCR5’s natural activity of directing the migration of immune cells towards sites of inflammation in the body. (Link)

NEW Stromedix - STX-100 is being developed for the treatment of chronic allograft dysfunction in kidney transplant recipients. Also exploring IPF indication. Humanized monoclonal antibody to integrin αvβ6, going into Phase 2.

UPDATE Symphogen - Rozrolimupab (Sym001) is a recombinant polyclonal composition of 25 different Rhesus D specific antibodies for the treatment of primary Immune Thrombocytopenia and for Anti-RhD prophylaxis (ADP) in prevention of Hemolytic Disease of the Newborn. This product was returned to Symphogen from Biovitrum Swedish Orphan for strategic reasons on Dec 30, 2010. Phase 2 data presented at ASH on Dec 12, 2011 showed that rozrolimupab exhibited a favorable safety profile and induced a rapid increase in blood platelets in patients with Immune Thrombocytopenia Purpura (ITP). (Link)

Symphogen - Novel polyclonal antibody technology platform with a promising antibody in development for RSV (Sym003), still in the preclinical stage.

Therapure - TBI 304 is a monoclonal antibody that mimics the natural ability of hemoglobin to stimulate stem cells to produce red blood cells. TBI 304 is in the preclinical stage. (Link)
Thrombogenics - **TB-402** is a novel human antibody which partially blocks Factor VIII, an essential blood clotting factor. Reported positive Phase 2 data. ThromboGenics and its partner BioInvent plan to out-license TB-402 for its later stage development and commercialization. Currently dosing a P2b study. ([Link](#))

Tracon Pharma - TRC105 is a human chimeric monoclonal antibody that binds CD105 (or endoglin), a target that is essential for angiogenesis. A Phase 1 trial of TRC105 for patients with advanced cancer is nearly complete and a Phase 1/2 trial of TRC105 for patients with prostate cancer is ongoing. ([Link](#))

Viventia - Vicinium® has VB4-84, a humanized, single-chain antibody fragment specific for the EpCAM antigen. The antibody fragment is recombinantly fused to a truncated form of Pseudomonas exotoxin A, ETA(252–608), engineered to lack the cell binding domain, but to retain the active domains necessary to induce cell death. Has done well in Phase 2a studies in bladder cancer. ([Link](#))

Xencor - Developing an anti-CD30 (XmAB 2513) antibody for Hodgkin’s disease and T-cell lymphoma. Has finished Phase 1. ([Link](#))

**NEW** Xoma - XOMA 3AB, is a biodefense anti-botulism antibody candidate in Phase 1 studies.

Y’s Therapeutics - Anti-CD26 Humanized Monoclonal Antibody for solid tumors. Phase 1 ready.

YM Biosciences - Is developing an EGFR antibody targeting HER1, Nimotuzumab, for solid tumors. Late stage and on the market in developing countries. Believes that this drug could be introduced to the U.S. market in the next few years, depending on Cuba policy.

**ANTI-INFECTIVES**

2M Biotech - CBR-2092, a rifamycin-quinolone hybrid antibiotic, has been evaluated in two Phase 1 human studies. Based on data from animal models, CBR-2092 represents a unique agent for the treatment of MRSA. ([Link](#))

Achaogen - Achaogen’s lead compound, ACHN-490, has displayed efficacy in research and nonclinical studies against systemic infections caused by multi-drug resistant (MDR) Gram-negative bacteria. Safety Phase 1 data at ICAAC looked good. Phase 2 studies are planned. ([Link](#))

**UPDATE** Affinium Pharmaceuticals - AFN-1252 is a potent inhibitor of bacterial fatty acid biosynthesis under development (in Phase I) as an oral treatment for drug resistant staphylococcal infections like MRSA. This product was recently reformulated into an oral tablet form prior to starting a new Phase 1 study in October 2010. Update: Company raised $15mm in August 2011 and is launching a Phase 2 study. ([Link](#))

AmpliPhi - Formerly Targeted Genetics. Preparing for a Phase 3 trial of BioPhage-PA for the treatment of otitis media. Also effective in cystic fibrosis. BioPhage-PA is a mixture of six bacteriophages that destroy Pseudomonas aeruginosa. Bacteriophage or phages are naturally occurring viruses that consist of an outer protein hull enclosing genetic material. ([Link](#))

**NEW** Basilea - Ceftobiprole is a cephalosporin for the treatment of the increasing number of patients with severe methicillin-resistant Staphylococcus aureus (MRSA) infections. Has completed Phase 3 studies. Looking for a partner. Also open to licensing rights to Isavuconazole for invasive fungal infections.

**NEW** BioAlliance Pharma - searching for a U.S. Partner for Oravig. Oravig is miconazole buccal tablets for the treatment of oropharyngeal candidiasis (OPC), more commonly known as thrush, in adults and children age 16 and older. This drug was returned by Strativa Pharmaceuticals recently to BioAlliance.

BioRelix - BioRelix uses RiboSwitches as a new class of anti-infectives. ([Link](#))
Cempra Pharmaceuticals - Taking **CEM-101** a highly potent macrolide into a Phase 2/3 trial. CEM-101 is active in vitro against M. pneumoniae, M. hominis and Ureaplasmas, including macrolide-resistant strains. Waiting until clinical data are in hand before initiating discussions. ([Link](#)) ([link2](#))

Cempra - preparing CEM-102 (Fusidic Acid or Taksta®) for Phase 3 studies that is designed to show non-inferiority to linezolid in patients with acute bacterial skin and skin structure infections. ([Link](#))

**NEW** CG Pharmaceuticals - CG400549 is a potential first-in-class antibiotic targeting ENR (Enoyl-acyl carrier protein reductase) or FabI (Fatty acid biosynthesis type I). It is being developed for MRSA and VRSA. CG400549 recently completed Phase I studies in Europe and Phase 2a study will be initiated soon.

Destiny Pharma - Novel antibiotics based upon dicationic porphyrins. **XF-73** has shown safety and preliminary efficacy against MRSA. ([Link](#))

Enanta - Developing once a day bicyclotide (modified macrolides azithromycin) like for community acquired infections and hospital based MRSA. ([Link](#))

F2G - FG3622 is currently in Phase 1 with a novel broad spectrum antifungal. ([Link](#))

Foresight Biotherapeutics - Has recently completed a Phase 3 trial of FST-201 (dexamethasone 0.1%) Otic Suspension vs. the FDA-approved drug Ciprodex (ciprofloxacin 0.3%, dexamethasone 0.1%) Otic Suspension (Alcon Laboratories, Inc.) in the treatment of acute otitis externa (Swimmer’s ear). ([Link](#))

Furiex - regained rights to broad spectrum quinolone from J&J in May 2011. Interested parties should contact Sailash.Patel@furiex.com. ([Link](#))

IASO Pharma - developing zabofloxacin, a fluoroquinolone antibiotic, for Community Acquired Pneumonia. ([Link](#))

Inimex - **IMX942** is a broad spectrum immune defense activator in Phase 1 that targets bacteria such as methicillin-resistant Staphylococcus aureus (MRSA) or vancomycin-resistant Enterococcus (VRE). ([Link](#))

**NEW** Italfarmaco, ITF-2534 is a triazole enantiomer for fungal infections. This drug has completed a Phase 1 trial.

Jina Pharma - Lipid based Amphotericin B Gel is Indicated in acute, chronic and recurrent type of skin fungal infection and cutaneous leishmaniasis. Provides specificity to target fungal cells. Has longer PK than approved products such as Ambisome®. ([Link](#))

Kenta Biotech - Outlicensing antibodies for HAP and pseudomonas infections, **KBPA101** has completed Phase 2a studies and reported 100% survival in hospital-acquired pneumonia.

**NEW** Lytix Biopharma AS - Novel ultra-rapid bactericidal antimicrobial agent capable of killing highly resistant bacteria. Broad spectrum of action, Gram +, Gram -, fungi and yeasts.

**NEW** Mayne Pharma - Lozanoc™ (SUBLE®-itraconazole) is an improved patent protected formulation of itraconazole to treat fungal infections. The bioavailability of SUBLE®-itraconazole is twice that of the originator product (Sporanox©) and shows reduced intra- and inter-subject variation. A Marketing Authorisation Application (MAA) in the EU has been submitted (November 2010) and discussions with the FDA are underway regarding further requirements for 505(b)2 filing and US registration. Interested parties should contact andrew.dunbar@maynepharma.com.

McMaster University - Outlicensing a novel class of streptogramin antibiotics ([Link](#)). Preclinical.

Merlion - Developing finafloxacin, a best in class 4th generation fluoroquinolone being targeted against severe, life-threatening infections. Compound has successfully progressed through to mid-stage clinical development. Oral formulation demonstrated in PoC studies compelling efficacy in uncomplicated UTI and the eradication of
*Helicobacter pylori.* IV formulation currently completing Phase I trials and Phase 2 studies in complicated UTI are planned for late 2011, as are clinical protocols in complicated respiratory tract infections. MerLion are exploring strategic alternatives for this product with the assistance of Torreya Partners. For further details, contact Rodolphe.grepinet@torreyapartners.com. ([Link](#))

**UPDATE** Methylgene - Developing oral Hos2 antifungal compound. MGCD290 targets the fungal Hos2 enzyme and was designed to be co-administered with azoles, in particular fluconazole, to potentiate and enhance activity against fungal infections. Entering large Phase 2 trial against vaginal yeast infections. ([Link](#))

**UPDATE** NabriVA Therapeutics - Finished Phase 2 with **BC-3205**, is an oral pleuromutulin agent with activity against gram positive and gram negative bacteria and atypicals. Positive data reported out.

**NEW** NabriVA Therapeutics - **BC-7013** is a topical antibiotic active against resistant Gram-positive pathogens, including MRSA. It has completed Phase I. Company interested in partnering in second half of 2012.

**UPDATE** Optimer - Promising Phase 3 data for **Prulifloxacin** in infectious diarrhea. Favorable comparison versus ViroPharma’s vancomycin. Open to a partnership transaction for this drug following the recent approval of Dificid (fidaxomicin) by the FDA.

**NEW** Palau Pharma - Phase 2b trials complete for oral anti-fungal product, albaconazole in onychomycosis. Has also been in trials for vulvovaginal candidiatisis and tinea pedis. ([Link](#))

**NEW** Paratek Pharmaceuticals - Broad spectrum antibiotic with IV and oral forms for treatment of moderate to severe resistant and susceptible skin, respiratory tract and urinary tract infections typically requiring hospitalization. Phase 2 and 3 studies in cSSSI concluded. Registration trials are launching. This product was returned by Novartis despite impressive data. Interested parties welcome to contact Dennis Molnar, Vice-President, Corporate Development (dmolnar@paratekpharm.com).

**NEW** Pergamum - Antimicrobial peptide DPK-060 to treat and prevent skin infections; lead indication skin infections (atopic dermatitis). Clinical Phase I/II, proof-of-concept study successfully completed. Currently preparations for two additional Phase 2 studies are ongoing.

Phage Biotech - Preclinical work on phages as antibiotics. ([Link](#)). Also see related Biocontrol ([Link](#)).

**UPDATE** Polymedix - **PMX-30063** is a novel Phase 1 broad spectrum amphiphilic antibiotic. Works as a mimic of host defense proteins. Recently reported positive Phase 1 data and now in Phase 2 trials for cSSSI from *staph aureus*. Interested parties are welcome to contact shelmling@polymedix.com (Steffen Helmling, VP Business Development). ([Link](#))

**UPDATE** Polyphor - Looking to outlicense **POL7080** which is a PEM compound with selectivity for Gram-negative bacterial strains, and for Pseudomonas in preclinical models. In Phase 1 studies.

Recombinogen - Outlicensing Rumycins which is in the pre-clinical stage- calcium dependent lipopeptide antibiotics. ([Link](#))

**NEW** Rempex - planning to file an NDA in 2012 for an undisclosed antibiotic. ([Link](#))

Rib-X Pharmaceuticals - Developing **Delafloxacin** (next gen quinolone) and radezolid (oxasolidinone). Both in Phase 2 with impressive data. Looking to partner one or both compounds. ([Link](#))

Sequella - SQ109 also has excellent activity against H. pylori, and can kill 99.99% of these bacteria with concentrations easily achievable in stomach contents and tissues. Beginning a Phase 2 study. Also active against TB. Recently licensed rights to Russia and CIS. ([Link](#))
TaiGen - In Phase 2 development Nemonoxacin, a novel quinolone, in MRSA/CAP infections for U.S. and China markets. (Link).

Tetraphase Pharmaceuticals - Tetracyclines for using novel synthetic chemistry. Recently reported Phase 1 data for TP-434 activity in humans. (Link)

**UPDATE** Theravance - TD-1792 is a heterodimer antibiotic that combines the antibacterial activities of a glycopeptide and a beta-lactam in one molecule. In Phase 2, gets positive results. Interested parties should contact crogers@theravance.com.

Third Stream Bioscience - Developing a novel skin antimicrobial based upon a chemical composition developed by Procter & Gamble. Promising data in dermatology (acne) and a variety skin cleansing applications. Company is in an active sellside process. (Link)

Toyama - T-2307 is a novel broad spectrum antifungal which has shown potent activity against Candida and Aspergillus as well as Cryptococcus, for which few drug therapies are available. In Phase 1.

**UPDATE** Trius Therapeutics - In Phase 3 with Torezolid phosphate, a second generation oxazolidinone antibacterial prodrug that is a potent inhibitor of Gram positive bacterial pathogens including MRSA. Company went public in 2010 and has a market cap of approximately $198mm. In a July 2011 deal, Bayer will commercialize torezolid in China, Japan and all other countries in Asia, Africa, Latin America and the Middle East. Bayer is paying $25 million up front plus 25% of the total development costs. (Link)

NEW $ Undisclosed - two marketed antibiotics in U.S.. One is facing generic competition. Revenues total around $10mm.

NEW $ Undisclosed - large pharma disposing of a marketed antibiotic with global rights. This product is off patent.

$ Undisclosed - marketed antifungal with revenues > $10mm. Hospital setting is where generally used.

University of Western Ontario - Novel antifungal agent with strong pre-clinical efficacy versus candidas. (link)

NEW Ventria - has developed a recombinant lactoferrin for the prophylaxis and treatment of infection in prematurely born children. Positive POC dataset for this product.

Zurex - Zuragen used for prevention of catheterrelated bloodstream infections. Potentially of high value in the hospital setting. (Link)

**BANKRUPTCY AND RESTRUCTURING SITUATIONS**

NEW AlteaTherapeutics - has agreed to shutter its operations according to a story published in the Atlanta Business Chronicle on Dec 9, 2011 (Link). Atlanta-based Altea Therapeutics Corp. was developing a proprietary, noninvasive method to deliver therapeutic proteins, conventional drugs and vaccines through the skin by creating “micropores” on the skin’s surface.

Aryx Therapeutics - ATI-2042, an improved amiodarone like molecule, for reduction of atrial fibrillation. Also has tecarfarin - an anticoagulant. GI candidate with promise. Update: Feb 19, 2010: Company retained Cowen to explore strategic options. Dec 15, 2010: “Over the course of the strategic process ARYx initiated earlier this year, the most significant interest, even in the absence of a binding offer, was shown in ARYx’s gastrointestinal product candidate, naronapride (ATI-7505), demonstrating the potential value of the asset. Also, interactions with the US Food and Drug Administration ("FDA") in April 2010 substantially clarified the remaining clinical development requirements for the compound. As a result, the lead investors in ARYx encouraged the company to seek substantial additional funding to continue the development of naronapride internally, and such funding has been
actively pursued since late summer without final resolution.” Company close to default on debt. Update: March 2011 - company went into a wind down of its operations. (Link)

Ceragenix - in Chapter 11 bankruptcy with a skin cream and assets in the anti-infective area. (Link)

NEW Commonwealth Biotechnologies – Richmond VA company has filed for bankruptcy court protection.

NEW Graceway - Could consider sale of products from 3M and has hired Lazard to explore alternatives through an ongoing process. Aldara for acinic keratosis a key seller but was recently genericized. Update: Nov 23, 2011 - Medicis acquired Graceway for $455mm after the company filed for Chapter 11 bankruptcy on Sep 29, 2011.

NEW Orbus Pharma - Canadian generic drug maker is in bankruptcy. Has a variety of generic CNS drugs on the market. (Link)

NEW Peptimmune – has been in bankruptcy. MS assets recently sold to third party.

NEW Undisclosed player - dermatology company with more than $40mm in revenue has hired a financial advisor to restructure its debt that likely exceeds intrinsic value of assets. Process has been underway for a month or two.

Vion Pharmaceuticals - Received an approvable letter for Onrigin, a late stage alkylating agent. Has > $15mm in cash but $60mm in debt. Filed for Chapter 11 bankruptcy and is being advised by Roth Capital. FDA has made it clear that a randomized Phase 3 trial will be required.

NEW Vyteris - has closed operations. Several programs are in development at this company including patch products for women’s health and pain applications.

BIG PHARMA / BIG BIOTECH PROGRAMS FOR OUTLICENSING

Biogen Idec - Looking to outlicense Galiximab, an anti-CD80 antibody, which has shown activity in B-cell lymphomas. Has gone through Phase 3 trials. Biogen looking to outlicense after a recent strategic review. (Link)

Biogen Idec - looking to outlicense BIIB021, an HSP90 modulator, targeted for GIST. (Link) (Link2). Also outlicensing BIIB028, an HSP90 modulator that is in Phase 1 studies.

Biogen Idec - looking to outlicense Volociximab, a chimeric monoclonal antibody that inhibits the functional activity of a5ß1 integrin, a protein found on activated endothelial cells. Blocking the activity of a5ß1 integrin has been found to prevent angiogenesis. This product is jointly owned with Abbott’s Facet Biotechnology. (Link)

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Biogen Idec - looking to outlicense an anti IGF1-R antibody for solid tumors. Has progressed into Phase 2 studies. (Link)

GlaxoSmithKline - running a process to divest non-core OTC brands with assistance from Goldman Sachs. The products to be divested, which are primarily sold in Europe and the United States, had sales in 2010 of approximately £500 million, 10% of GSK’s total Consumer Healthcare turnover. They include analgesics: Solpadeine, BC and Goody’s; vitamin and supplement product Abtei; feminine hygiene treatment Lactacyd; and alli for weight management. (Link)

Ipsen - Completed a strategic review in 2011 with the theme of increasing focus and growing the footprint. The implications of this for potential partnerships or asset divestitures are threefold: (1) Ipsen looking for a partner in
the French primary care arena, (2) Ipsen looking to find a buyer for its industrial site in Dreux France which makes solid dose and liquid formulations and (3) “Ipsen will explore all options to maximize value (of its short stature franchise) while meeting its obligations to patients and partners. It will be managed directly by regions and countries.”

**UPDATE** Pfizer - has announced that it is selling vet medicines and its nutritional business. Both businesses are leaders in their class. Update: process to sell infant nutrition business is rumored to be underway in November 2011. It is believed that the vet medicines business is most likely to be spun out.

Sanofi / Genzyme - Outlicensing **RDP58** (Delmitide), a clinical-stage D-amino acid decapptide with established anti-inflammatory properties. Proof of concept for this product opportunity has been demonstrated in models of inflammatory bowel disease (IBD).

Sanofi / Genzyme - Outlicensing tolevamer for CDAD which is in Phase 3 studies but missed the primary endpoint. ([Link](#))

Sanofi / Genzyme - Looking to outlicense Genz-29155, a novel, small molecule, orally bioavailable, 1x daily novel inhibitor of TNF-α signaling. Proof of concept has been demonstrated in multiple models of transplantation rejection, multiple sclerosis (MS), sepsis, inflammatory bowel disease (IBD) and lupus. ([Link](#))

**NEW** Undisclosed - large pharma disposing of a marketed antibiotic with global rights. This product is off patent.

**NEW** Undisclosed - large pharma disposing of a marketed oncology drug for NHL with revenues of around $5mm. Significant barriers to entry.

**NEW** Undisclosed player - approved hospital anesthetic in the United States with differentiation from existing products. Also could be used in physician office setting where sedation required. Open to a product sale or other value creating arrangement. Global rights available.

**NEW** Undisclosed - division of larger pharmaceutical company with approximately $30mm revenues in oncology product sales. Active sale process underway.

Undisclosed - Large Pharma disposing of several late stage compounds for treatment of depression.

Undisclosed - Large Pharma disposing of several late stage compounds for treatment of hyperlipidemia.

Undisclosed - Pharma disposing of more than 20 compounds including several with commercial rights in EU and Asia.

**NEW** Undisclosed - Pharma disposing of large mature product. Off patent with revenues over $80mm.

Undisclosed - pharma company is open to divesting a marketed specialty cardiology product with revenues > $30mm per annum.

Undisclosed - Large pharmaceutical company interesting in outlicensing a late stage program in wound care.

Undisclosed player - Partnering a Phase 2 progesterone modulator for uterine fibroids and endometriosis.

**BIGGER DEALS ($200MM+ IN VALUE)**

**NEW** Abdi Ibrahim Ilac - largest Turkey drug maker with revenues over $800mm. Reported in May 2011 that was in discussions to sell a strategic stake.
UPDATE Actelion - has received takeover approaches from several strategic bidders according to the Wall Street Journal (10/7/2010). Activist shareholder in Elliott pushed for a change of control transaction. Wall Street Journal Sep 28, 2011: “Elliott Advisors Cuts Actelion Stake in Wake of Control Battle”. Elliott failed to put its own directors on Board and JP Garnier, formerly CEO of GSK, recently became Chairman. A takeover of Actelion appears to be quite unlikely in light of these events.

UPDATE Allos Therapeutics - Oncology marketer with Folotyn® for liquid tumors. After a recently failed merger attempt with AMAG, Allos is rumored to be continuing to explore strategic alternatives with the assistance of JP Morgan. (Link)

UPDATE $ AMAG - Feraheme IV iron product - Recently approved. Company is commercializing on its own. AMAG’s recent merger attempt with Allos was ended in November 2011. On Nov 17, 2011, AMAG announced that it had hired Jefferies to explore all opportunities to enhance shareholder value. Frank Thomas, interim CEO of AMAG indicated: “We will expeditiously complete this process, which will include a parallel review of a potential sale of the company and other strategic merger and acquisition transactions.”

UPDATE Amarin - Developing a pure omega-3 for reduction of triglycerides. Phase 3 data reported out very strong. Company has indicated that is has retained a financial advisor (Lazard) to explore a sale. Update: Nov 2011 - no sale reported and company’s valuation has dropped from over $2bn to under $1bn. Amarin recently filed an NDA for its lead product. Amarin appears to be a likely takeover candidate for the next year. (Link)

Amoun Pharmaceutical - An Egyptian company that manufactures off-patent branded generic formulations. It is one of the largest pharmaceutical companies in Egypt. It sells over 135 human products in over 275 forms. Of these products, 33 occupy the top 2 positions in their respective therapeutic categories and subcategories. Open to a company sale or strategic stake purchase. Reuters - Dec 6, 2010: “CVC is also preparing to sell Amoun, one of Egypt’s biggest drugmakers, people familiar with the matter told Reuters on Oct. 20. It owns Amoun with two other co-investors.” Bloomberg reported in Feb 2011 that the company has been looking for $1 billion in a sale price but that political upheaval in Egypt has hindered the sale.

NEW Amylin - has purchased rights to Byetta® back from Eli Lilly. This GLP-1 inhibitor is expected to have $1 billion or more in revenues and has substantial ex-U.S. revenue. Amylin is searching for a commercialization partner outside of the United States.

COMPLETED Anadys - ANA598 is a low-nanomolar inhibitor of HCV genotype 1a and 1b replicons via N5b polymerase. Has started a Phase 2 trial. Anadys also has ANA773, an oral inducer of endogenous interferons with nice Phase 1 data. May 2010 - Lazard retained to act as advisor to Anadys to explore strategic alternatives. Nov 2010 press release: Anadys continues to work with Lazard Frères & Co. LLC. to explore potential strategic transactions, in parallel with moving the ANA598 and ANA773 programs forward. Update: Oct 17, 2011 - Roche acquires Anadys for $230mm - a 256% premium.

UPDATE $ Avanir - Launched Neudextra for the treatment of pseudobulbar effect and, potentially, other indications. Positive data and good patent picture. Widely rumored to be an M&A candidate. $5.7 million in revenue in first year of launch (soft numbers). Market cap of $248 million as of November 2011. EMA application recently accepted.

COMPLETED $ Azur Pharma has hired Lazard to advise on funding options including a potential stake sale according to the Sunday Times on May 22, 2011. Company has a solid franchise as a marketer of drugs in the CNS and women’s health areas. A company sale could be possible. Update: Sep 19, 2011 - Jazz Pharma merges with Azur Pharma as an Ireland domiciled company with former Jazz shareholders taking 80% of the combined company. A transaction closing is expected in Q1 2012.

UPDATE Biofarma - Biofarma for sale via JP Morgan. Reuters (12/6/2010): Citigroup's (C.N) venture capital arm and two co-investors have begun an auction of Turkish copycat drugmaker Biofarma, three people familiar with the
matter said, in what could be Turkey’s biggest healthcare deal.” Update: A number of parties rumored to have looked at this asset but price ask was seen as prohibitive. As of Nov 2011 no sale had taken place.

Chelsea Therapeutics - NORTHERA™ (droxidopa), is an orally active synthetic precursor of norepinephrine initially being developed for the treatment of neurogenic orthostatic hypotension. Large potential in the Parkinson’s market where there has been a reported 60% reductions in falls in PD patients with NOH - also could work in fibromyalgia. On market already through Dainippon Pharma in four Asian countries. Company recently reported that it is filing for an NDA based on studies that have already been completed and has recently completed its QTc work. Anticipates approval by Q2 2012.

UPDATE Covidien Pharmaceuticals - According to the New York Times on June 7, 2011 “Covidien, the health care company spun out from Tyco four years ago, may seek to sell its pharmaceutical unit...” This division of Covidien (formerly Mallinckrodt) has a major business selling pain products (both branded and generics) and imaging products. Revenues are around $2 billion. Update: As of December 2011 no sale has taken place. Company is rumored to be interested in a sale of the whole business (rather than pieces) for a full price. YE 2011 numbers reported on Nov 15, 2011 and were robust (sales up 9% yoy) with strong performance in generics.

Dyax - Has DX-88, for hereditary angioedema. Recently approved. No known sale process underway but company appears to be an attractive takeover target.

UPDATE Exelixis - According to Bloomberg on April 12, 2011: “Exelixis Inc. is working with Goldman Sachs Group Inc. to prepare for potential takeover offers after its experimental drug helped prostate-cancer patients in a study.” Company’s XL-184 has reported dramatic data on reducing metastatic prostate lesions at ASCO. Update: company has hired a Chief Commercialization Officer with intention to introduce cabozantinib to the U.S. market and has reported strong data for cabozanitinib in the treatment of medullary thyroid cancer.

Gen-Probe - Widely rumored to be for sale with interest from Novartis. Well known diagnostics company. Process well underway but company viewed as expensive.

GlaxoSmithKline - running a process to divest non-core OTC brands with assistance from Goldman Sachs. The products to be divested, which are primarily sold in Europe and the United States, had sales in 2010 of approximately £500 million, 10% of GSK’s total Consumer Healthcare turnover. They include analgesics: Solpadeine, BC and Goody’s; vitamin and supplement product Abtei; feminine hygiene treatment Lactacyd; and alli for weight management. (Link)

COMPLETED Graceway - Could consider sale of products from 3M and has hired Lazard to explore alternatives through an ongoing process. Aldara for actinic keratosis a key seller but was recently genericized. Update: Nov 23, 2011 - Medicis acquired Graceway for $455mm after the company filed for Chapter 11 bankruptcy on Sep 29, 2011.

UPDATE Hi-Tech Pharmacal - Market rumors in April 2011 that company could be purchased. As of December 2011 no transaction had taken place of this manufacturing company of generic liquids and ointments. The company has delivered strong earnings throughout 2011 and is trading at close to twice the price in Dec 2011 it had earlier in 2011.


Intermune - Bloomberg reports on April 27: “Biotechnology company InterMune Inc known for its drug to treat lung scarring, hired Goldman Sachs (GS.N) to help it weigh a possible sale... Goldman has been conducting an auction of InterMune for more than a month and some potential bidders have been spooked by the biotechnology company’s expectations for a sale price, Bloomberg news reported.” Company commercializing Pirfenidone in Europe. Company market cap over $2bn.
Ipsen - has completed a strategic review in 2011 with the theme of increasing focus and growing the footprint. The implications of this for potential partnerships or asset divestitures are threefold: (1) Ipsen looking for a partner in the French primary care arena, (2) Ipsen looking to find a buyer for its industrial site in Dreux France which makes solid dose and liquid formulations and (3) “Ipsen will explore all options to maximize value (of its short stature franchise) while meeting its obligations to patients and partners. It will be managed directly by regions and countries.”

Mannkind - Looking to partner Afresa, an inhalable insulin, that has an upcoming PDUFA date. Rumored to be in an active M&A mode. Company received an approvable letter on Mar 15, 2010. The FDA asked for more information on data designed to support the clinical utility of Afrezza, as well as information about how comparable the commercial version of the product is to the version used in clinical trials.

Meda - A Wall Street Journal Report on July 27, 2011 indicated that Valeant had approached Meda about a takeover offer. Meda responded indicating that its board of directors had not received an approach of the kind reported in the WSJ.

Morton Grove Pharmaceuticals - Owned by Wockhardt and involved in the development, manufacture, and marketing of prescription oral liquid and topical liquid pharmaceuticals and is one of the leading manufacturers and marketers of prescription oral liquid pharmaceuticals in the United States. No announcement of an sale but Wockhardt would likely consider a good price. Update: April 2010 - Wockhardt's USD 110m foreign currency convertible bonds are at the core of a dispute between Wockhardt and its foreign lenders which has stopped a recent sale from Wockhardt to Abbott on nutritionals.

NEW Onyx - rumored to be exploring strategic alternatives. Substantial value potential tied to a recently filed NDA for carfilzomib, a protease inhibitor, for the treatment of liquid tumors including multiple myeloma. Bloomberg reported on Nov 30, 2011 that Onyx is working with Centerview as a financial advisor. On Dec 12, FDA indicated that an acceleated review would not take place.

NEW Par Pharmaceuticals - Relational Investors filed a 13D showing 8.7% ownership of this company on November 25, 2011. In the 13D Relational indicated: “Despite these opportunities for improvement, the Reporting Persons believe that the Company may continue to trade at discounted prices because of industry challenges and the Company’s sub-optimal size and product scope. If the discount persists, the Reporting Persons believe that, in keeping with sound stewardship principles, the Company’s board will be required to consider broad strategic alternatives. Specifically, the Reporting Persons are confident that substantial cost savings could be achieved in a transaction with a strategic buyer.” Note: there is no evidence that Par Pharmaceuticals has received offers or is open to receiving such offers at present.

UPDATE Pfizer - has announced that it is selling vet medicines and its nutritional business. Both businesses are leaders in their class. Update: process to sell infant nutrition business is rumored to be underway in November 2011. It is believed that the vet medicines business is most likely to be spun out.

Qualicaps - owned by Carlyle. Maker of gelcaps (like Capsugel) is up for auction. UBS is rumored to be sellside advisor on business with approx. $350mm in EBITDA. As of June 2011 no sale had taken place.

NEW Rottapharm - for sale according to the Wall Street Journal. Company has two Phase 3 drugs in development and a strong group of branded products in the market. Revenues over $850 million. Sale price could be over $2.5 billion. Company rumored to be using Credit Suisse to find a buyer.

NEW San Raffaele del Monte Tabor - privately-held Italian pharmaceutical company, is soliciting offers other than the EUR 350m binding offer from Vatican bank IOR and Italian entrepreneur Vittoria Malacalza, according to Il Sole 24 on Dec 2, 2011.

UPDATE Savient Pharmaceuticals - FDA approved KRYSTEXXA (pegloticase) in Sep 2010, a PEGylated uric acid specific enzyme indicated for the treatment of chronic gout in adult patients refractory to conventional therapy.
Company is seeking a commercial buyer and is using JP Morgan and Lazard in its search for an acquisition partner. Savient is now pursuing a launch of Krystexxa on its own and is building a 50-person plus sales force. Update: First year sales were $2.6 million. Market Cap of $160mm. (Link)

UPDATE Sigma-Tau - Reuters (6/2/11): “Italy’s Sigma-Tau is eyeing the sale of up to 49 percent in the family-owned drugmaker to private equity, ahead of a possible IPO that could value it at more than $2 billion, people familiar with the situation said.” Company has approximately €1bn revenue with a strong rare disease business and a well established European brand business. It is believed that discussions regarding a stake sale are no longer active but rather the company is focused on restructuring its Italian business.

Stada - Chief executive Hartmut Renttzlaff indicated an openness to takeover offers after the recent sale of Ratiopharm.

UPDATE Thrombogenics - completed Phase 3 studies for Microplasmin in Phase 3 clinical development for the non-surgical treatment of back of the eye diseases. Good evidence of efficacy with two positive Phase 3 trials reported. Expected to be on market by end of 2012. Would consider a sale. (Link)

NEW Undisclosed Player - U.S. generic company with approximately $90mm in gross revenue is searching for a buyer with the assistance of a financial advisor. Company has substantial presence in medicines for cough & cold, womens health and pediatrics.

NEW Undisclosed - German vertically integrated marketer of generic and branded pharma products with strength in cardiovascular, dental and veterinary medicines. Revenues of this company exceed €100mm.

NEW Undisclosed Player - U.S. generic company with more than $100 million in revenues is for sale. Company has a significant branded business and a manufacturing facility.

NEW Undisclosed player - Division of Indian generic company that is focused on oral solid dose preparations is for sale. Revenues over $300mm. Company has strength in formulation work and manufacturing. Ships product to numerous global locations.

COMPLETED Undisclosed player - U.S. generic player with approximately $200mm in net revenues and strength in drug delivery solutions would consider a company sale. Update: Par acquires Anchen Pharmaceuticals for $410mm in cash on Aug 24, 2011.

COMPLETED Undisclosed player - Large pan-Asian drug company open to a sale. Update: Menarini acquires Invida Group on Nov 16, 2011. Price not announced but Invida a substantial business with more than $200mm in revenue.

UPDATE Vivus - Looking to partner Onexa in Europe and other ROW territories. An approval is possible in the EMA with long-term market exclusivity in mid-2012 (or sooner).

NEW Wockhardt - rumored to be in a process to sell its substantial nutrition business as part of a process to pay down external debt.

BIODEFENSE

Cleveland Biolabs - Looking to partner a radiation antidote (CBLB502) with positive animal data.

Elusys - Has positive animal data for Anthim, a high-affinity humanized monoclonal antibody targeting the anthrax toxin protective antigen. Recently received a U.S. government contract for up to $143 million. In active strategic discussions. (Link)
PharmAthene - Protexia - BChE functions as a natural bioscavenger, like a sponge, to absorb and degrade organophosphate poisons (e.g. nerve agents) before they cause neurological damage. Phase 1 studies were presented and good news so far. PharmAthene is developing Protexia in collaboration with the U.S. Department of Defense as a broad spectrum prophylaxis for the U.S. military. Company recently indicated that it is open to individual product deals despite not having a company level sale process. (Link)

Soligenix - The company is looking to divest biodefense assets including vaccines for ricin toxin botulinum toxin and a product which protects against radiation exposure. Process via HealthPro BioVentures.

**NEW** Xoma - XOMA 3AB is a biodefense anti-botulism antibody candidate in Phase 1 studies.

### BIOSIMILARS

**NEW** Green Cross - In Phase 3 with a pegylated GCSF.

**NEW** Hanmi Pharma - developing long-acting versions of EPO, GSCF, HGH and an exendin analogue.

**NEW** ISU Abxis - Biosimilar to ReoPro for adjuvant of PCI (Percutaneous Coronary Intervention) procedure. Clotinabl is anti-GPllb/IIIa monoclonal antibody and Fab Protein which blocks platelet aggregation. On market in 7 countries. Also has biosimilar for Cerezyme.

Undisclosed generic player - Looking for a partner for a portfolio generic biologics in development. Wants to retain manufacturing rights.

Undisclosed player - a number of emerging markets players are developing portfolios of generic injectable drugs including cytotoxics and anti-infectives.

**NEW** Undisclosed player - looking to partner a recombinant formulation of human serum albumin. Broad applications and advantages over blood derived product. For further details contact david.holbrook@torreyapartners.com.

**NEW** USV - offering a biogeneric PTH. Teriparatide is a recombinant form of N-terminal 1-34 amino acids of human parathyroid hormone which is a 84 AA protein. Approval pending in India. Also partnering a growth hormone and a PDGF product.

Zelos - A better PTH analogue. Strong Phase 2 data. Company also pursuing an intranasal PTH and a potential “biogeneric” PTH. (Link)

### BONE AND SPINE / ORTHOBIOLOGICS

**UPDATE** Abiogen - Neridronate is an amino-bisphosphonate used in Metabolic Osteopathy and has gone into Phase 3 trials. Also being studies for patients with thalassemias. (Link)

Ablynx - Has positive Phase 1b safety and efficacy data for a “nanobody” targeting RANK-L (compare to Amgen’s Prolia®). Dataset presented at EULAR in May 2011. (Link)

Accelalox - Use of locally delivered proteins to promote fracture healing. Promising osteobiologics company. (Link)

Anika - Introducing MONOVISC™ which is a single injection supplement to the synovial fluid of the osteoarthritic joint in order to provide symptomatic relief of joint pain. Contains sodium hyaluronate. Company also focusing on obtaining FDA clearance for three orthopedic products from FAB which are Hyaloglide, Hyalonect and Hyalofast by the end of Q1 2011. Anika intends to launch its own sales force for the orthopedic market for all of the above products. (Link)
Bio3 Research - HMGB1 for cartilage repair with promising preclinical results.  (Link)

Biomimetic - Rumored acquisition target with injectible bone graft line based upon rhPDGF. PMA application pending and apparently in good shape. Looking for an ex-U.S. partnership.  (Link) Ships augment bone graft to Canada. (Link)

BioTime - Using Hystem® hydrogels in the development of therapeutic products for the treatment of osteoarthritis, and plans to develop HyStem®-Rx as a cell delivery medical device to improve outcomes in cell transplant procedures, including reconstructive and cosmetic surgery. (Link)

NEW Chiesi - CHF4227 - SERM for treatment of osteoporosis. Ready for Phase 2 studies.


Enobia - Developing ENB-0040, a human recombinant tissue non-specific alkaline phosphatase, for the treatment of hyperphosphatasia - a debilitating bone condition. Positive data in man. Update: Company has continued to report positive data and may be looking at a rapid approval with FDA. As a result, has not proceeded with potential M&A deal in light of value inflection ahead.

Ferring - Outlicensing a PTH analogue for osteoporosis. Pre-clinical. (Link)

NEW Kaken - KCB-1B is a Trafermin (rh-bFGF) product and under development for Bone Fracture in Japan.

Kuros Biosurgery - KUR-113 has shown strong efficacy in the treatment of open fractures in tibia patients. Study was a Phase 2b trial with 200 patients that reported out in April 2011.

NEW Lexicon Pharmaceuticals - Pursuing LX1031 for IBS. Could a potent agent for treating osteoporosis. Lexicon completed a Phase 2 clinical trial of LX1031 in patients with non-constipating IBS in November 2009. Company in active discussions on this and two other molecules.

Medi-Post - CARTISTEM® has been developed to treat damaged articular cartilage on knee as a result of acute traumatic injury or more chronic conditions such as osteoarthritis. Phase 3 clinical trial has shown efficacy in cartilage regeneration. KFDA approval pending. U.S. IND filing in process. (Link)

Mesoblast - Preclinical trials showed that a single, low dose of Mesoblast’s allogeneic adult stem cells into severely damaged intervertebral discs resulted in dramatic reversal of the degenerative process, regrowth of disc cartilage and sustained normalization of disc pathology, anatomy and function. (Link)

NEW Ono Pharmaceutical - Has completed Phase 2 studies with ONO-5334, a cathepsin K inhibitor for the treatment of osteoporosis. Open to an ex-Japan partnership transaction.

Sanos Bioscience - Promising Phase 2a data for a GLP-2 for the treatment of osteoporosis.

Tarsa Therapeutics announced that the patient enrollment has been completed in TAR01-201, a double-blind Phase 2 study comparing Tarsa’s oral recombinant salmon calcitonin (from Unigene) to placebo in approximately 120 postmenopausal women who have low bone mass (osteopenia) and are at increased risk of fracture. (Link)

$ Tigenix - Launching ChondroMimetic and ChondroCelect in the EU, a collagen based implant for the treatment of small osteochondral lesions. In studies have seen restoration of the articular surface and integration with the surrounding bone and cartilage at six months in patients treated with ChondroMimetic. U.S. approval by BLA will require an additional study. (Link)
Tokai Pharmaceuticals - **Semparatide**, a PTH, has been in Phase 2. Being developed for increasing osteoblasts in stem cell transplantation.

University of South Carolina - Preclinical binder of PTH1r - promising alternative to use of parathyroid hormone in treatment of bone loss. Supportive pre-clinical data. ([Link](#))

University of Western Ontario - Preclinical peptides which bind collagen and promote bone repair and regeneration in preclinical models. ([Link](#))

**NEW** USV - offering a biogeneric PTH. Teriparatide is a recombinant form of N-terminal 1-34 amino acids of human parathyroid hormone which is a 84 AA protein. Approval pending in India.

Versalion Pharma - An osteotropic alendronate-b-cyclodextrin conjugate for treatment skeletal diseases, particularly stress fractures. The conjugate shows very strong binding to hydroxyapatite (HA, main component of the skeleton). Its ability in forming molecular inclusion complex with prostaglandin E1 (PGE1), a potent bone anabolic agent) was confirmed by phase solubility experiments and differential scanning calorimetry (DSC). ([Link](#))

Zelos - A better PTH analogue. Strong Phase 2 data. Company also pursuing an intranasal PTH and a potential “biogeneric” PTH. ([Link](#))

**CARDIOLOGY - PRIMARY CARE**

**Aegerion** - MTP-1 Adjunct therapy to statins for persons with familial hypercholesterolemia. Similar products in development at Japan Tobacco. Recently reported very strong Phase 3 data. High interest. Recently completed an IPO. ([Link](#))

**UPDATE** Amarin - Developing a pure omega-3 for reduction of triglycerides. Phase 3 data reported out very strong. Company has indicated that is has retained a financial advisor (Lazard) to explore a sale. Update: Nov 2011 - no sale reported and company’s valuation has dropped from over $2bn to under $1bn. Amarin recently filed an NDA for its lead product. Amarin appears to be a likely takeover candidate for the next year. ([Link](#))

Amulet Pharmaceuticals - Technology to deliver nitric oxide in conjunction with pharma treatments. Exploring a sale transaction.

**Anthera Pharmaceuticals**— Varespladib is an inhibitor of secretory phospholipase in Phase 2 for prevention of arteriosclerosis. Promising data and other molecules. In an ongoing Phase 3 program. ([Link](#))

**Ardelyx** - developing non-absorbed compounds for the control of salt buildup and excess fluid retention. Related compounds in development at Sorbent Therapeutics. The potential market for this class of drugs in persons suffering from salt-related hypertension is very large.

BTG - Angiotensin Therapeutic Vaccine (ATV) for high blood pressure. This therapeutic vaccine (biologic) is in early Phase 2 clinical development. Large potential market as alternative approach to blood pressure management. ([Link](#))

Carolus Therapeutics - **CT-2008** is a peptide antagonist of the RANTES-PF4 heterodimer which enhances leukocyte recruitment causing inflammation. Preclinical studies have demonstrated that therapeutics targeting the RANTES-PF4 heterodimer can slow the development of plaque in atherosclerosis-susceptible murine models. Also see Novimmune.

Cardax - Heptax, a preclinical compound, reduces cholesterol, triglycerides, blood pressure, liver enzymes, and fasting blood sugar while raising HDL. ([Link](#)) Update: Have been awarded two patents, one including (CDX-085).
Cerenis Therapeutics - Looking to partner its synthetic apoA-1HDL product and a PPAR-delta (with Phase 1 data). Recently completed a financing to support further studies with the lead program.

Cerenis Therapeutics - Would consider partnering a non-flushing niacin that has been through Phase 2 studies. Company recently reported positive data from these studies. (Link)

Essentials - Diazoxy choline controlled release tablets for reduction of triglycerides and overall lipid profile. Strong Phase 2 data in reducing triglycerides. Now going into Phase 3 with an SPA for a single study to get to approval.

UPDATE Furiex Pharmaceuticals - developing a muscle sparing statin, PPD 10558. In a preclinical study comparing PPD 10558 and a commonly prescribed statin, a high dose of the marketed statin caused severe muscle necrosis and increases in liver and kidney function tests and muscle enzyme (CK) levels while PPD 10558 did not demonstrate any such abnormalities. Update: Furiex discontinued development of this product on Dec 8, 2011 after this drug missed its primary endpoint. (Link)

Intekrin - completed Phase 2 trials with INT131 a PPAR gamma, the PPAR subclass predicted to be less likely to cause the side effects of TZDs. Looking to partner or M&A.

NEW Japan Tobacco - Looking to outlicense JTT-130, an MTP inhibitor for cholesterol management, particularly hypertriglyceridemia. This compound has completed Phase 2 studies and has shown rapid clearance and activity in small intestine. These properties are likely to limit liver toxicity concerns associated with this drug class.

UPDATE KaroBio - Eprotirome is a novel, selective, thyroid hormone receptor agonist, developed for treatment of dyslipidemia. Successfully showed reduction in LDL in a recent Phase 2 study. Karo is in a Phase 3 EU trial to demonstrate a reduction on top of statins in familial hypercholesterolemia. (Link).

Nicox - developing a promising nitric oxide donating statin. High potential to supplement statin therapy.

Omthera - pursuing Epanova in a Phase 3 study. Epanova is a patent protected, novel, ultra-pure mixture of the free fatty acid forms of eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Behind Amarin in development but company claims to have a superior efficacy profile. (Link)

Quatrax - Several interesting drugs in dyslipidemia using TSH (thyromimetic) approach. Also see Karo.

Relypsa - positive Phase 2 data achieved for a potassium binder to treat hyperkalemia which is prevalent in persons with end stage renal disease and those with congestive heart failure. Company recently raised $70mm to get through Phase 3 studies of this promising treatment. (Link)

Thorne Research - HEP-40 Cholesterol binder that reduced LDL cholesterol by 17 points over a statin, on average, in a Phase 2 study. (Link)

Undisclosed player - has a promising non-flushing niacin.

$Undisclosed player - company with a marketed but not promoted cardiovascular product with 2011 revenues around $9 million.

UCLA - Selective inhibitor of M-CSF to reduce risk of atherosclerosis (link)

NEW Undisclosed player - Phase 2 data on drug for raising HDL and lowering triglycerides. Novel mechanism and impressive safety profile. Seeking ex-U.S. partnership.

Veloxis - AtorPhen. Phase 2 low dose fenofibrate with atorvastatin. Also looking to partner rights to Fenoglidge outside of the U.S.
**UPDATE** Vitae Pharmaceuticals - Working on renin inhibitors for hypertension. Preparing to go into Phase 2b studies in 2012. ([Link](#))

**CARDIOLOGY - SPECIALTY CARE**

Ablynx - [ALX-0081](#) is a Nanobody targeting von Willebrand Factor (vWF), to reduce the risk of thrombosis in patients with acute coronary syndrome (ACS) and thrombotic thrombocytopenic purpura (TTP). Through Phase 1b. Phase 2 data are expected.

Action Pharma - [AP214](#) finished Phase 2, a modified dMSH-peptide analogue, for the treatment of post-surgical kidney injury in the cardiac surgery context. The results demonstrate that AP214 is well tolerated and safe at all three dose levels. At the highest dose level, AP214 prevents the increase in serum creatinine by 50-60%, and in the IL-6 response by 30-40%, compared to placebo (trends based on blinded data). This is consistent with a robust effect to prevent postsurgical acute kidney injury (AKI) and systemic inflammatory response.

Acusphere - Imagify, pending EMA filing for this cardiac imaging agent. Highly differentiated from SPECT agents on the market insofar as permits evaluating of myocardial perfusion, an important marker of coronary artery disease (CAD) without radioactive markers. Potential first-to-market drug in $600 million and $2 billion addressable market in E.U. and U.S. respectively. Recent SPA from FDA in US. Will require one further trial for FDA approval. Company is assisted by Torreya Partners. For details contact peter.garrambone@torreyapartners.com ([Link](#))

**NEW** Adventrx - ANX-188 is a novel, purified, rheologic and antithrombotic compound initially being developed as a first-in-class treatment for pediatric patients with sickle cell disease in acute crisis. Ready for Phase 3 studies and open to partnering deals.

Aldagen - ALD-401 is a type of adult stem cells called aldehyde dehydrogenase-bright (ALDHbr) stem cells isolated from cord blood. ALD-401 is being developed for the post acute treatment of ischemic stroke and is in a Phase 2 study.

AnGeS MG - Japanese company is looking to partner Collategene, a therapeutic using hepatocyte growth factor (an angiogenic factor) which creates new blood vessels for the treatment of ischemic diseases. Very positive Phase 3 data in treating PAD. An SPA has been agreed with the FDA for a Phase 3 trial of Peripheral Arterial Disease.

**UPDATE** ARCA - Gencaro (Bucindolol) is a nonselective beta-blocker which is being developed for treatment of heart failure on a genetically-targeted basis. Very strong data in preventing death post-MI and currently pursing a trial for this drug in AF. Approvable letter from FDA with guidance on a further trial required for approval. Open to a partnership deal on Gencaro. ([Link](#))

ARMGO Pharma - In Phase 2a with a product that stabilize ryanodine receptor/calcium release channel. ARMCO hypothesizes that it may be possible to restore the strength of muscle contraction. ([Link](#))

Biolex - [BLX-155](#) is a direct acting thrombolytic (clot dissolver) which was superior to t-PA in a recent preclinical study reported at ISTH. ([Link](#))

**NEW $** Canyon Pharmaceuticals - Canyon Pharmaceuticals is seeking to build a strategic alliance preferentially on a worldwide basis to commercialize Desirudin (Iprivask® US-registration / Revasc® EU-registration), a first/best in class anticoagulant drug which is approved by the FDA, the EMA and several of the rest of world authorities.

Desirudin is a direct thrombin inhibitor and the only subcutaneous direct thrombin inhibitor (DTI) with approval for venous thromboembolism (VTE) prophylaxis following hip- and knee-replacement surgery.
Cardiokine - has recently received rights to Lixivaptan for the treatment of hyponatremia. Has finished three Phase 3 studies but has not published the results to date. Two vaptans on the market but potential differentiation of this product. Actively exploring a company sale. (Link)

Cardioxyl - CXLI-1020 in development for an initial indication of Acute Decompensated Heart Failure, and is completed a Phase I/IIa clinical trial with positive results. Company has recently launched a dose ranging Phase 2 study.

Celladon - developing MYDICAR®, a genetically-targeted enzyme-replacement therapy intended to restore levels of SERCA2a and in phase 2 development for the treatment of acute and chronic heart failure. Company reported positive data at AHA in Nov 2010.

Cordex - ATPace™ has an approved SPA to enter a pivotal Phase 2b/3 clinical trial for the treatment of a common heart arrhythmia called paroxysmal supraventricular tachycardia. Cordex believes that ATPace™ is a more reliable and superior product than existing therapies because of its unique ability to recruit the vagus nerve. Cordex has hired WBB Securities to explore strategic options for this product and, potentially, the company. (Link)

Corimmun - German company developing COR-1, a peptide drug for the treatment of immune-mediated heart failure due to anti-ß-adrenergic auto-antibodies, entering phase Ila. Also developing Revacept, a biological for the prevention and treatment of atherothrombosis, Key indications coronary heart disease, acute myocardial infaction and transitory ischemic attacks and stroke. Entering phase 2a shortly. (Link)

Debiopharm - Debio 0614 inhibits the Na+K+ ATPase pump and acts as a calcium modulator without tachycardia, Positive efficacy results from a recent Phase 2a study. Company would consider partnerships.

Diffusion Pharmaceuticals - Looking to partner trans sodium crocetinate for treatment of intermittent claudication and diseases associated with hypoxia. Reported encouraging data from a Phase 1b study for claudication at AHA in Nov 2010.

Endotis - Developing EP-42675, a synthetic glycol-drug as an anticoagulant. Reported positive Phase 1 data at AHA in December 2009. Has now developed an antidote to the same drug and has reported promising data (also see Polymedix and Portola). (Link)

Evolva - In Phase 1 for EV-077, an oral thromboxane inhibitor, for managing platelet aggregation and diabetic nephropathy. In December 2010 reported that had carried out further formulation work and had confirmed that it had found a well behaved formulation of this drug in a Phase 1 study. (Link)

FCB-Pharmicell - Cerecellgram is a bone marrow derived stem cell composition, containing mesenchymal stem cells and cells specifically useful for brain regeneration. Cerecellgram is being developed for the treatment of acute ischemic stroke. In a Phase 3 randomized clinical trial. (Link)

Kai - KAI-1455 is a selective epsilon protein kinase C activator designed to reduce ischemic injury during planned surgical procedures, such as coronary artery bypass grafting, vascular surgery and pediatric cardiac surgery. In Phase 2b trials and open to a partnership transaction. (Link)

Lacer - Spanish company looking for partner for LA-419, an oral eNOS regulator targeted at ischemic cardiovascular disorders. (Link)

Medicure - May sell U.S. rights to Aggrastat, originally a Merck drug, for acute cardiac indications. Update: company restructured its liabilities on July 18, 2011 in order to reduce debt. Beal Advisors will be working with the company to find a partner or buyer for Aggrastat going forward. (Link)

Menarini - Would partner Amediplase, a novel thrombolytic agent that has completed Phase 2 testing. (Link)
$ Microbix - Owns Urokinase, formerly of Abbott (Abbokinase). Did revenues of $10mm+ recently. Not formally for sale but purchased for a low price due to manufacturing issues which have largely been fixed. (Link)

Milestone Pharmaceuticals - Has a novel and potent short-acting calcium channel antagonist in preclinical development for the treatment of transient cardiovascular conditions such as angina and atrial arrhythmias. (Link)

NanoCor Therapeutics - Preparing for clinical trials of Carfostin™, an intracellular protein therapeutic for the treatment of Chronic Heart Failure (CHF). Carfostin™ is comprised of the delivery of a therapeutic gene, protein Phosphatase-1 Inhibitor-1 (I-1) with the use of Biological NanoParticles (BNPs™) and the Self-Complementary Vector Technology. (Link)

Neurocrine - Looking to partner Urocortin 2 program for CHF. Can improve cardiac output without raising heart rate. Will report out Phase 2 data in 2011. (link)

UPDATE Nile Therapeutics - Would consider outlicensing its chimeric natriuretic peptide in Phase 1b clinical studies for the treatment of acute decompensated heart failure. Data from this trial were encouraging. (Link)

NoNO - seeking a partner with the capability to develop and commercialise NA-1 (a PSD95 inhibitor) for acute ischemic stroke (AIS).

Oxford University - Has identified a novel receptor for anti-platelet drugs - G6B. (link)

Paion - Looking to outlicense Solulin, an improved recombinant version of thrombomodulin, a blood coagulant. Has completed Phase 1 studies. Also in Phase 2 with flovagatran, a direct thrombin inhibitor. (Link)

H Pervasis - In a POC P1b trial to study PVS-10200 to prevent restenosis in patients with peripheral arterial disease (PAD) who undergo an angioplasty and stent procedure in the superficial femoral artery. Very promising indication. Actively exploring options.

UPDATE Polymedix - Finished Phase 1 with a Factor Xa antitode that reverse effect of heparin and associated compounds. Proof of concept achieved. Now in Phase 2a trial for the reversal of anticoagulant activity of enoxaparin. Also, see Portola for a related Factor Xa antitode. (Link)

UPDATE Regado Biosciences - Developing injectible antithrombotics. Impressive Phase 2b data reported in November 2011 from REG1 Anticoagulation System, a novel two-component system comprised of a Factor IXa inhibitor anticoagulant and its complementary control agent. (Link)

UPDATE Sembiosys - APOa1 is a injectible protein that leads to atherosclerotic plaque regression. Preclinical version of protein is available with very strong proof of principal data. Update: Company enters into a licensing deal for partial geographic rights with Tasly of China. (Link)

Syngis - Developing AX200 in acute stroke. In Phase 2 trials. (Link)

Thrombogenics - TB-402 is a novel human antibody which partially blocks Factor VIII, an essential blood clotting factor. Reported positive Phase 2 data. ThromboGenics and its partner BioInvent plan to out-license TB-402 for its later stage development and commercialization. Currently dosing a P2b study. (Link)

Trevena - TRV120027, is a β-arrestin biased ligand of the angiotensin receptor (AT1R) in development for acute heart failure. Ten months into a Phase 2a study. (Link)

$ Undisclosed - pharma company is open to divesting a marketed specialty cardiology product with revenues > $30mm per annum.
NEW $ Undisclosed - Pharma company with a product for heart failure and revenues over $20mm would consider a sale.

Via Pharmaceuticals - VIA-2291 is a reversible inhibitor of 5-LO, a key enzyme in the biosynthesis of leukotrienes that impact inflammation and atherosclerosis. Positive Phase 2 data in a recent ACS trial. Also in Phase 1 studies of VIA-3196, a THR beta agonist for management of dyslipidemia.

Viron Therapeutics - Developing VT-111, a serine protease inhibitor. Reduces restenosis and increases plaque stability in animal models. Has recently finished a Phase 2a study in PCI patients. (Link). Viron has been granted U.S patents for organ transplant and arthritis drug candidates.

Xention - In a Phase 1 study for a novel treatment for atrial fibrillation (Link)

NEW Zensun - Phase 2 studies for treatment of CHF via remodeling of cardiac muscle cell sarcomeric and cytoskeleton structure or cell-cell adhesion using rhNRG-1 protein.

**CNS - NEUROLOGY**

Acadia Pharmaceuticals - In Phase 3 studies of pimavanserin for the treatment of Parkinson’s disease psychosis. This program had been partnered to Biovail but was returned after the merger with Valeant. (Link)

Acceleron - Latest stage unpartnered product is ACE-031 which works by inhibiting myostatin and other negative regulators of muscle mass thereby freeing the body to rebuild muscle tissue. Phase 2 trials underway in DMD. Partnered with Shire outside the U.S. Acceleron will retain all commercial rights in North America. (Link)


$Acorda - FDA approved AMPYRA® (dalfampridine) on Jan. 2010, which is indicated as a treatment to improve walking in patients with MS. Launch of this product is now underway. Recent studies show increased improvement in walking with use of AMPYRA. Partnered Europe rights to BiogenIdec.Company considered a top acquisition candidate. (Link)

Adamas Pharmaceuticals - In Phase 2/3 with ADS-5102, a proprietary extended release (ER) formulation of amantadine indicated for Levodopa-induced dyskinesia in Parkinson’s disease. (Link)

Adeona - in Mid-Phase 2 of a trial for oral estradiol for MS. (Link).

Adeona - recently missed primary endpoint in trial for zinc therapy for the treatment of Alzheimer’s disease. Company reported a retrospective subgroup analysis in June 2011 where the treatment was associated with an improvement in symptoms. (Link)

**UPDATE** Adex - In Phase 2a for diplaglurant, an mGLUR5 NAM for the treatment of Parkinson’s Dyskinesia and dystonia. This program is regarded as a very promising approach for PD. Additional data are expected in the second half of 2012 and company could seek a partnership when these data are in. Company recently announced a reorganization and CEO stepped down. Update: new CEO appointed in October 2011. (Link)

Aeoulus Pharmaceuticals - AEOL 10150 is an oral catalytic antioxidant that mimics and thereby amplifies the body's natural enzymatic systems for eliminating reactive oxygen species. Product has completed Phase 1 and is indicated for ALS. Company recently received a $118 million research and development contract from BARDA. Company reported significant survival advantage in non-himan primate study of AEOL 10150 as a treatment against lung damage from radiation exposure.
Allon Therapeutics - Allon Therapeutics is testing davenutide in a variety of CNS indications including Progressive Supernuclear Palsy (PSP). Positive Phase 2 data in amnestic mild cognitive impairment (aMCI), a precursor to Alzheimer’s disease (AD). (Link). Allon is currently a Phase 2/3 clinical trial in progressive supranuclear palsy (PSP), a type of frontotemporal dementia (FTD). Phase 3 is underway. Allon intends to commercialize in and outside of North America.

Allozyne - Long acting interferon beta for MS. Phase 2 data are upcoming. Update: Allozyne recently merged with Poniard but remains interested in partnering its interferon beta program.

NEW Andalusian Initiative for Advanced Therapies - A research group from the Andalusian Public Health System (SSPA) has developed a new composition for the treatment of cognitive disorders associated with Fragile X Syndrome. Phase 1b trial results have shown that the composition counteracts the production of free radicals by reducing oxidative stress, while improving behavior and learning in individuals affected with the Fragile X Syndrome. (Link)

Avineuro Pharmaceuticals - has reported positive Phase 1 data on AVN-322, a 5-HT6 antagonist for Alzheimer’s Disease. Is preparing to commence Phase 2 studies. (Link)

Bluebird Bio - Positive Phase 1b type data for LentiGlobin® for gene therapy treatment in a young adult with severe betathalassemia, a blood disorder that is one of the most frequent inherited diseases. Also has positive data for a treatment for Adrenoleukodystrophy (ALD) is a rare, inherited neurological disorder.

Bial - BIA 9-1067 is currently being developed by BIAL to be used in addition to L-DOPA/carbidopa or L-DOPA/benserazide preparations in PD patients. Currently in Phase 3 studies. Promising results have been obtained for BIA 9-1067 in previous studies. (Link)

Bionomics - BNC210 is a novel anti-anxiolytic which has completed Phase 1 studies and displays good drug-like properties. Two parallel Phase Ib trials of BNC210 were initiated in France in October 2010 and results exceeded expectations. (Non-con)

Bioprojet - In Phase 3 studies of pitolisant for the treatment of excessive daytime sleepiness in Parkinson’s disease. Being tested as an add-on to modafinil. Supportive Phase 2 data. (Link)

BTG - BTG-1531. This NCE is a proprietary EP4 antagonist with potential applications in inflammation, pain and CNS (including MS). Clinical data is available from several studies. (Link)

BTG - Pleneva is an orally administered investigational compound, designed to restore the balance between pro-inflammatory (e.g. tumour necrosis factor-α TNFα) and anti-inflammatory cytokines (e.g. transforming growth factor-β1, TGFβ1) in patients with multiple sclerosis (MS). In a small single-centre, double-blind, placebo-controlled clinical pilot study, aPleneva prototype provided clinical benefits to patients with RRMS, including decreases in both relapse rate and EDSS scores, with additional benefits seen on pain and cognitive endpoints. A European multicenter Phase IIa study has completed patient recruitment. (Link)

Celtic Pharma - Has hired an investment bank to divest Xerecept, a novel agent in late Phase 3 studies for peritumoral brain edema. See a related program at Eustralis Pharma.

CeNeRx BioPharma - CBX722 has potential as a novel anxiolytic, demonstrating a significant effect on both endocrine and cardiovascular biomarkers associated with stress. CBX722 has been studied in approximately 800 patients, demonstrating safety and efficacy in a range of mood and anxiety disorders. (Link)

Chelsea Therapeutics - NORTHERA™ (droxidopa), is an orally active synthetic precursor of norepinephrine initially being developed for the treatment of neurogenic orthostatic hypotension. Large potential in the...
Parkinson’s market where there has been a reported 60% reductions in falls in PD patients with NOH - also could work in fibromyalgia. On market already through Dainippon Pharma in four Asian countries. Company recently reported that it is filing for an NDA based on studies that have already been completed and has recently completed its QTc work. Anticipates approval by Q2 2012.

Chiesi - CHF1512, an oral, soluble form of carbidopa/L-dopa for Parkinson’s disease. SPA issued by FDA for Phase 3 study. Ready to start Phase 3 trials under protocols agreed with the FDA through the SPA process. Note: the rights to this product were returned to Chiesi from Vernalis in 2010 after failing to find a partner. (Link)

$ CNS Therapeutics - has introduced Gablofen, an AP rated intrathecal version of baclofen for control of severe spasticity among patients with movement disorders. This product has significant advantages over the existing marketed product and is likely to have significant revenue traction over the next several years. (Link)

Colucid Pharmaceuticals - Lasmitidan, a novel drug for migraine, selectively targets 5HT1F receptors expressed in the trigeminal nerve pathway is entering Phase 3 trials. Company open to partnering or sale transaction. (Link)

Cynapsus Therapeutics - Developing APL-130277, an apomorphine thin film strip formulation for the rescue of patients experiencing “OFF” periods in Parkinson’s disease. Expects to enter its first human clinical trials of APL-130277 in the second half of 2011. (Link)

Cytokinetics - According to a recent press release, Cytokinetics, Inc. announced opening of next phase 2 clinical trial of CK-2017357, a fast skeletal muscle activator, in patients with amyotrophic lateral sclerosis. CK-2017357 selectively activates the fast skeletal troponin complex by increasing its sensitivity to calcium, leading to an increase in skeletal muscle force. Saw activity in a recent Phase 2a trial Actively seeking partnerships. (Link)

$ Daval International - Aimspro, orphan Status Designations have been awarded by the Therapeutic Goods Administration (TGA) for the treatment of Krabbe Leukodystrophy and Amyotrophic Lateral Sclerosis. In June, 2011 completed Phase 2 trial study of AIMSPRO for treatment of bladder dysfunction in patients with secondary Progressive MS. To report topline data in the Fall. Sold on a named patient basis.

EnVivo Pharmaceuticals - EVP-6124, a gamma secretase inhibitor, for Alzheimer’s disease showed signs of cognitive improvement in a Phase 2a study. Currently in Phase 2b studies. Recent issues with Lilly Semagacestat have raised questions about gamma secretase inhibitors as a class. Looking for a partnership. EnVivo currently has partnered with Mitsubishi Tanabe Pharma Corporation (MTPC) for the further research, development, and commercialization of its lead product, EVP-6124, in several Asian countries (most notably, in Japan). (Link)

ExonHit - Looking to partner EH202, which has completed Phase 2a studies in Alzheimer’s disease.

Galantos Pharma - Developing Memogain, which is made up of galantamine, a nicotinic acetylcholine receptor sensitizer marketed as Razadyne by J&J. In pre-clinical studies.

Green Cross - Open to international outlicensure of GCC1290K which is a prodrug of 3-hydroxymorphinan. This has progressed through Phase 1 studies in Korea. (Link)

Green Cross - Developing Intravenous Immune Globulin (IVIG). In Phase 3 in Korea. Recently went forward with an IND in the United States. Extensive evidence supports use of this product to treat Alzheimers disease. (Link)

Impax Laboratories - Impax is looking to partner the ex-US rights to IPX056 - a controlled release baclofen for spasticity in multiple sclerosis. (Link)

Innate Therapeutics - Going into Phase 2a studies with MIS416, an immune system modulator, in multiple sclerosis. Patent issued for MS in New Zealand in January, 2011 and pending in international markets. Began recruiting patients for Phase 2 clinical trials in September 2010 and initiated trials in October 2010. (Link)
Intec Pharma - An analysis of the results showed that the administration of the Levodopa drug with the Accordion-Pill significantly improved its efficacy. Administration of the drug with the Accordion-Pill enabled a significant reduction in the number of Levodopa doses per day in comparison to the currently marketed Levodopa products. (Link)

Intellect Neurosciences - OX1 is a Phase 1b copper binding molecule that stabilizes non-toxic soluble forms of amyloid and protects brain cells by blocking redox-mediated neurotoxicity. It has been tested for safety in healthy elderly people in Phase 1 clinical trials. (Link)

KemPharm - KP106 is a novel prodrug for the treatment of attention-deficit hyperactivity disorder (ADHD). KP106, a new chemical entity (NCE), is composed of the active pharmaceutical d-amphetamine and a ligand and was created through application of KemPharm’s proprietary Ligand Activated Therapy (LAT) approach. Positive Phase 1 data. (Link)

Kw. Hakko Kirin - looking to partner a Phase 3 Parkinson’s drug, Kw-6002. Istradefylline is an adenosine A2a receptor antagonist. (Link)

Manhattan Pharmaceuticals - reported positive Phase 1b data for AST-915 for the treatment of essential tremor. Compound associated with reductions in the severity of tremor. (Link)

MarcoPolo Pharmaceuticals - VLB-01 is a ML2 (MT3/Quinone oxidoreductase 2 (QR2)) receptor agonist with a unique receptor profile implying first-in-class anti-epileptic activity. VLB-01 is being developed for treatment of epilepsy. Phase 2a results are pending. (Link)

Marinus Pharma - Positive phase 2a data for Ganalaxone, a novel epilepsy neurosteroid, in which statistics showed significant reductions in seizure frequency. The compound is also beginning trials for its affect on PTSD patients and UCD neurologists have been awarded a grant to study the compound in treatment of Fragile-X syndrome starting later in 2011. (Link)

Medesis Pharma - Medesis Pharma, announced the successful completion of a Phase I clinical trial of NP03 (lithium citrate), a disease modifying treatment for Huntington’s disease. (Link)

Medicinova - Running a partnership process for MN-166, indicated for the treatment of relapsing multiple sclerosis. MediciNova is collaborating with Kyorin Pharmaceutical Co., Ltd. in the global development of MN-166. (Link)

Memen Pharmaceuticals - Phase 2 data show improvement in memory from levo-amphetamine sulfate. Company looking for a partner to conduct further Phase 2 work.

Mithridion - MCD-386, a muscarinic agonist, has completed phase I studies and seeks to halt or slow down the progression of Alzheimer’s disease and improve memory and cognitive function. (Link)

Nelson Pharmaceuticals - Developing MagneVal, a reformulated, patented version of Valproate for epilepsy that is less subject to carnitine deficiency. (Link)

Neuraltus Pharmaceuticals - In Q1 2011, started a Phase 2 randomized, double-blind, placebo-controlled, multicenter study of NP001 in subjects with amyotrophic lateral sclerosis (ALS). Works by regulating macrophages. (Link)

Neuren Pharma - developing Motiva for improvement of apathy and cognition after stroke. Missed endpoint in a recent Phase 2b trial. (Link)

UPDATE Neurocrine - In Phase 1b with a VMAT2 inhibitor designed to slow the transport of monamines such as dopamine. Intended for Phase 2 studies in tardive dyskinesia associated with Parkinson’s. In second quarter 2011,
approached the FDA regarding filing of IND in the US and have meeting schedule with the FDA for June 2011. Enrolling second Phase 2b trial. Looking for ex-U.S. partners. (Link)

Neuroderm - In a Phase 2a study for ADHD with patch containing nicotine and other agents. (Link)

**NEW** Neuroderm - developing ND0611, a carbidopa patch for treating Parkinson’s disease that would largely improve the bioavailability of orally administered levodopa. Reported positive Phase 2 data in November 2011. (Link)

NeuroHealing Pharmaceuticals - dosing patients in a Phase II/III study to test the efficacy of NH001 (apomorphine) in accelerating the recovery and improving the outcome of patients in a vegetative state following a severe traumatic brain injury (TBI). (Link)

Neurologix - In Phase 2 with a gene therapy program for Parkinson’s Disease with positive data for a non-dopamergic approach. Has hired MTS Partners to seek “strategic collaborations.” Update: No transaction reported as of June 2011. (Link)

Neurotherapeutics Pharma - NTP-2014 has been evaluated in multiple animal models of epilepsy, neuropathic and nociceptive pain, and migraine. In every one of these models, the compound exhibited a dramatic level of efficacy, outperforming positive controls represented by some of the industry's most commercially successful therapies. An IND is being filed to go forward in man with this compound.

Neurosearch - In Phase 1b with Ordopidine for Parkinson’s dyskinesia. (Link)

Neuronova - In June 2011 NeuroNova completed a Phase I/II, randomized, double-blind, placebo controlled, safety and tolerability study of intracerebroventricular administration of sNN0031 (PDGF-BB) to patients with idiopathic Parkinson’s Disease of moderate severity, using an implanted catheter and a synchcroned pump. Also in Phase 1b for ALS therapy. (Link)

**UPDATE** Newron - has failed with ralfinamide in Phase 3 for lower back pain. Market cap around $45mm. Has a solid pipeline of CNS candidates. Open to an M&A deal. Update: Had announced a merger with BioTie which was terminated on Oct 28, 2011. Company looking for alternatives.

Noscira - Nypta® (tideglusib) is a GSK-3 enzyme inhibitor that has shown positive effects in experimental models against the main lesions that arise in Alzheimer’s disease: tau protein hyperphosphorylation, amyloid plaques, and neuron loss. In a Phase 2b trial. Also in a trial for the treatment of progressive supranuclear palsy. (Link)

Oxford Biomedica - In a Phase I/II trial of ProSavin for the treatment of Parkinson's disease (PD). This gene therapy has been associated with improvements in patient symptons. (Link)

Pharmaneuroboost - looking to start a Phase 3 program for a fixed dose combination of citalopram and pipamperone. (Link)

Prana - Actively partnering PTB2 for Alzheimers. Good Phase 2a data for novel aggregation inhibitor of amyloid beta plaque. Prana has planned a Phase IIb study to determine the impact of PBT2 on progression of cognitive and functional decline in patients suffering from mild to moderate Alzheimer’s Disease and is going forward with next trial.

**NEW** Proximagen - 5-HT1a agonist for refractive epilepsy. Safe and well tolerated in >500 patients. In a Phase 2 trial.

Psychogenics - Pursuing eltoprazine in Phase 2 studies for ADHD. Supportive Phase 2a data. (Link)
Raqualia - RQ-00000009 is a preclinical 5Ht-4 partial agonist. Compound penetrated into brain effectively and significantly improved memory and cognitive deficit in rodent models. In addition, RQ-00000009 decreased brain cortex β-amyloid proteins in Tg2576 mice.

Receptos - in a Phase 1 study for an S1P1 agonist for the treatment of multiple sclerosis. Expect to enter Phase 2 studies in 2012.

Repligen - open to partnering RG3039 and RG2833. 3039 IS A Phase 1 drug for spinal muscular atrophy and 2833 is a Phase 1 ready drug for the treatment of Friedreich’s Ataxia.

Siena Biotech - Selisistat is a first-in-class selective SirT1 inhibitor, a potentially disease-modifying mechanism for Huntington’s disease. The compound is currently in Phase 2a clinical trials.

SK Biopharmaceuticals - YKP3089 is a novel compound with broad-spectrum anticonvulsant activity under clinical development. Through recent a Phase Ila photosensitivity study, the potential for efficacy in humans was confirmed. (Link)

SK Pharmaceuticals - YKP509 - NCE that has been in 2000 patients for epilepsy and neuropathic pain. Looking for a partner.

Sonexa - ST101 is a small, orally active molecule that is well absorbed and efficiently penetrates the blood-brain-barrier. In development for Alzheimer’s disease with positive animal data. ST101 has completed Phase I studies and is being evaluated in Phase 2 Proof-of-Concept trials. (Link)

Spectrum Pharmaceuticals - looking for a licensee for SPI-339 a novel molecule for the treatment of ADHD. (Link)

Stemcells - HuCNS-SC is well-characterized, normal human CNS stem cells (HuCNS-SC) from brain tissue, isolated and purified using monoclonal antibodies against cell surface antigens. HuCNS-SC is being developed as intracerebral injection for the treatment of myelin disorders such as Pelizaeus-Merzbacher Disease. Phase 1 data upcoming in 2012. (Link)

Supernus - NDA to be filed soon for Epliga for Refractory Partial Onset Epileptic Seizures. Once a day CR version of oxcarbazepine. In addition, an NDA has filed for SPN-538, an extended release topiramate. Company has a royalty that has been partially monetized. No active M&A process underway but the company is venture owned implying an exit is possible. Company has an S-1 on file. (Link)

Suven Life Sciences - SUVN-502 is a potent, highly selective and active antagonist at 5-HT6 serotonin receptor. SUVN-502 is being developed as once daily oral formulation for the treatment of memory and cognitive disorders. Entering Phase 2a studies. (Link)

Sygnis AG - In Phase 2 with AX200 for stroke.

TauRx Therapeutics - planning to initiate two Phase 3 trials testing a new reformulated version of its tau inhibitor Rember for the treatment of Alzheimer’s disease. Very promising data obtained with this program. Company open to a partnership transaction.

Transition Therapeutics - has finished a Phase 1 study for TT-301 for traumatic brain injury.

Trophos - Olesoxime for ALS. In Phase 2/3. Active in preclinical models. No POC yet in man. Data expected in Q4 2011. Actelion has a go/no go decision to make to acquire this company based on a previous option agreement. (Link)
Undisclosed party - Developing orphan neurology products based upon a compound designed to correct certain mitochondrial defects.

**new** Undisclosed party - Positive Phase 2 data for a compound for the treatment of Fragile X syndrome. Company is seeking a buyer or global partnership with assistance of a financial advisor.

**new** Undisclosed party - Sale of marketed neurology product with U.S. rights, growing revenues and orphan protection. Interested parties should contact Benj Garrett (benj.garrett@torreyapartners.com).

Vectura Group - Positive data from a Phase 2b clinical study for its inhalation product, VR040 (apomorphine hcl), for the treatment of off episodes in patients with fluctuating Parkinson’s disease.

**NEW** Xenoport - XP19986 is a prodrug of the R-isomer of baclofen. Positive Phase 2 data for spasticity. XenoPort reached agreement with the FDA on a Special Protocol Assessment (SPA) for a pivotal Phase 3 clinical trial of arbaclofen placarbil (AP), previously known as XP19986, as a potential treatment of spasticity in multiple sclerosis (MS) patients.

**CNS - PSYCHIATRY**

Abiogen - Isoxazoline derivative which is being developed as an oral formulation for the treatment of generalized anxiety disorders. (Link)

Acadia Pharmaceuticals - Preparing to file an IND for AM-831, a small molecule product candidate for the improvement of cognition in persons with schizophrenia. This product is partnered with Meiji Seika Kaishia in Asia. Also see Bioline. (Link)

**UPDATE** Alexza - Looking to partner several inhaled products including ADASUVE (Loxapine) which recently met the primary endpoint in a Phase 3 Bipolar Disorder trial. A Phase 3 study in schizophrenia was successful. Product was partnered to Biovail and recently returned. Promising opportunity. Update: Dec 8, 2011: FDA advisory committee documents somewhat negative on pulmonary safety of this product but committee voted in favor its approval.

Auspex Pharma - SD-254 is a deuterated venlafaxine helps avoid multiple dose levels. Has completed Phase 2a studies and shown superior PK. (Link)

**UPDATE** $ Avanir - Launched Neudexta for the treatment of pseudobulbar effect and, potentially, other indications. Positive data and good patent picture. Widely rumored to be an M&A candidate. $5.7 million in revenue in first year of launch (soft numbers). Market cap of $248 million as of November 2011. EMA application recently accepted.

Avineu Pharmaceuticals - Positive topline results from a Phase 2a clinical proof of concept trial to assess AVN-211 as an augmentation therapy to improve cognition in schizophrenia patients. In a double blind trial in 50 patients stabilized on an atypical antipsychotic therapy, AVN-211 met the protocol criteria for positive results on the primary efficacy outcome measures. (Link)

Azeva Pharma - SRX246 and SRX251 are being developed as novel therapeutics for stress-related CNS disorders, including depression and Intermittent Explosive Disorder. Both are ready for Phase 2 studies. (Link)

**COMPLETED** $ Azur Pharma has hired Lazard to advise on funding options including a potential stake sale according to the *Sunday Times* on May 22, 2011. Company has a solid franchise as a marketer of drugs in the CNS and women’s health areas. A company sale could be possible. Update: Sep 19, 2011 - Jazz Pharma merges with Azur Pharma as an Ireland domiciled company with former Jazz shareholders taking 80$ of the combined company. A transaction closing is expected in Q1 2012.
BiolineRx - recently was returned rights to BL-1020 a late stage drug for cognitive improvement in patients with schizophrenia. Positive Phase 2 data.

Braincells - BC1224 contains sabcomeline, a direct-acting cholinergic muscarinic receptor agonist. BC1224 is being developed as a parenteral formulation for the treatment of major depressive disorders. In Phase 2 studies. (Link)

Braincells - also developing BCI-540. Results from the Phase 2a trial suggest BCI-540 has the potential to treat a difficult-to-treat population, people with MDD who have failed previous treatments, and have a co-morbid anxiety disorder. (Link) (Press release)

CeneRx - TriRima (CX 157) a reversible MAO-A inhibitor in Phase 2 for the treatment of depression. After phase 2 is completed, CeneRx will look for a partner. (Link)

Cortex - Developing AMPAKINE compounds for depression and schizophrenia. Recently returned to company from Merck for repartnering. Also received rights pack from Biovail in May 2011. Partnered on product, CX1632 via an option deal to Servier in June 2011. (Link)

Cyrenaic Pharmaceuticals - CYR-101 is a small molecule drug with a unique mechanism of action. It has high affinity for sigma-2 and 5-HT2A receptors and has been shown to be potentially effective in modulating dopamine pathways without the negative dopamine-related side-effects that are associated with all current antipsychotics. Promising Phase 2a data. (Link)

Envivo Pharmaceuticals - EVP-6124 is a potent, orally bioavailable and selective alpha-7 agonist, for patients with schizophrenia. Recent Phase 2b data showed that EVP-6124 had a clinically meaningful and statistically significant impact on patients’ overall cognition - the trial’s pre-specified primary endpoint - when taken in combination with second-generation antipsychotics and as measured by the full CogState overall cognitive index, or “OCI” (p=0.05 for all patients treated with EVP-6124 versus placebo). Also see Bioline.

NEW  Euthymics Bioscience - developing amitifadine for major depressive disorder. In a 318 patient Phase 2b/3 trial at present. (Link)

Inmedix - Owns use patents for outlicensing to use Pramexipole (Phase 2 completed) and ropinorole's phase I is completed. (Requip) for fibromyalgia.

UPDATE $ Intelgenx - CPI-300 is a novel, high strength of Bupropion HCl, the active ingredient in Wellbutrin XL(R). Indicated for depression. This product was approved in November 2011 and Intelgenx is in active licensing discussions to find a commercial partner.

Intracellular Therapeutics - Pursuing ITI-007 for schizophrenia and other compounds. This atypical antipsychotic is in Phase 2 and has a differentiated profile from drugs on the market and promises higher efficacy with a better side effect profile. (Link)

KemPharm - Developing a thin film strip with a contoured release of Adderal. Less abuse potential than Vyvanse. Looking to partner this drug which has completed Phase 1 studies. (Link)

MarcoPolo Pharmaceuticals - BC-19 is an eburnamine derivative, previously investigated for the indications of cerebral insufficiency and cognitive deficits. As an antidepressant, BC-19 had shown beneficial properties when administered to patients suffering from treatment resistant depression. (Link)

Medicure - In Phase 2 for the treatment of tardive dyskinesia (Tardoxal) as a side effect of schizophrenia treatments. (Link)

Naurex - depression drug based upon Glycine-site Functional Partial Agonists (GFPAs), peptides which are designed to achieve the strong efficacy of classic NMDA modulators without their limiting CNS side effects. Has completed
Phase 1 studies with no safety issues. Recently completed an $18mm financing and is in Phase 2a studies for this novel approach. (Link)

NoNO, Inc. - NA-1 is currently in a multicenter, placebo-controlled randomized Phase 2 trial testing its efficacy in reducing damage produced by strokes incurred following neurointerventional procedures.

Repligen - Would consider a partnership for Uridine which is in Phase 2b for bipolar depression. This compound recently failed its primary endpoint. (Link)

UPDATE: Reviva Pharma - RP-5000 is a potent, selective NCE being developed for the treatment of schizophrenia and is available as an oral formulation. Has finished Phase 1b studies with positive results. (Link)

Spectrum Pharmaceuticals - looking for a licensee for SPI-376 a novel preclinical molecule for the treatment of schizophrenia. (Link)

Synosia - Rufinamide (SYN-111) in Phase 2 in GAD. Eisai has the rights to market SYN-111 in the EU.

Transect Pharma - pursuing ultra low dose ondansetron as an adjunctive treatment of obsessive compulsive disorder. Phase 2 study coming up. (Link)

$ Undisclosed - ADHD marketed drug with revenues > $50 million from a pharma. Would consider a sale.

$ Undisclosed player - sale of company with over $10mm in revenue with largely genericized specialty products in CNS and renal disease.

NEW: Undisclosed - U.S. rights to a marketed drug for depression are available.

NEW: $ Undisclosed player - availability of product with psych and primary call point. $12mm product sales run rate.

University of Florida - Halogenated amino acids as a partial agonist of the glutamate-binding site of NMDA receptors for schizophrenia. Research stage.

University of South Carolina - Homolog of Ritalin for ADHD. Preclinical. (link)

CNS - SLEEP

Alliance Pharmaceuticals - Looking to outlicense Posidorm, a surge formulation of melatonin. Alliance is seeking a co-development and co-marketing partnership deal with a partner company to progress Posidorm through late stage development to product registration and subsequent marketing. (Link)

NEW: Aptalis - AdvaTab® Temazepam is the first ODT formulation of a highly prescribed benzodiazepine. In Phase 3 development. Looking for commercialization partner for this product.

Bioprojet - In Phase 3 studies of pitolisant for the treatment of excessive daytime sleepiness in Parkinson’s disease. Being tested as an add-on to modafinil. Supportive Phase 2 data. (Link)

Evotec - Would like to outlicense EVT-201, a GABAa Receptor Positive Allosteric Modulator for Insomnia. The results from Phase 2 have shown positive data, still looking for partners for further development. Update: Recently licensed China rights to Jingxin Pharma.

Intec Pharma - Intec Pharma announced the Phase 2 clinical data with Accordion Pill Zaleplon. The analysis of the intermediate results of the trial showed that taking the Zaleplon medication with the Accordion Pill resulted in statistically significant improvement in its effectiveness versus placebo. (Link)
Neurim Pharma - Circadin® 2 mg prolonged-release melatonin formulation, approved for use (up to 13 weeks) in treatment of primary insomnia characterized by poor quality of sleep in patients aged 55 years or over. (Link)

NEW Somnus Therapeutics - developing SKP-1041, a delayed release formulation of Zaleplon for sleep. Key indication is to prevent middle of the night wakening. Positive Phase 2 data. Company interested in finding a partner before starting Phase 3 studies.

UPDATE Transcept Pharmaceuticals - Looking for an ex U.S. partner for middle of night insomnia drug, Intermezzo. Transcept has formed a U.S. partnership with Purdue Pharma for Intermezzo. Drug was approved by FDA in December 2011.

NEW Undisclosed - rights to a marketed sleep drug may be available.

Vanda - Tasimelteon, Melatonin agonist for sleep wake disorders, in phase III. Has orphan designation.

CRITICAL CARE PRODUCTS

Action Pharma - AP214 finished Phase 2, a modified dMSH-peptide analogue, for the treatment of post-surgical kidney injury in the cardiac surgery context. The results demonstrate that AP214 is well tolerated and safe at all three dose levels. At the highest dose level, AP214 prevents the increase in serum creatinine by 50-60%, and in the IL-6 response by 30-40%, compared to placebo (trends based on blinded data). This is consistent with a robust effect to prevent postsurgical acute kidney injury (AKI) and systemic inflammatory response. (Link)

UPDATE AM-Pharma - Has achieved highly positive Phase 2 results in the treatment of acute kidney failure with alkaline phosphotase. Company advancing a backup program with stronger patent protection. (Link)

COMPLETED Artisan Pharma - ART-123 for sepsis in Phase 2b. Recently approved in Japan. Company was acquired in November 2011 by Asahi Kasei Pharma.

Aklepion - L-Citruline for the 20 percent of children who have heart surgery with use of the bypass pump develop pulmonary hypertension, or high blood pressure in the lungs. In early studies this product appears to prevent pulmonary hypertension from developing. Now in Phase 3 studies. (Link)


Diffusion Pharmaceuticals - Looking to partner trans sodium crocetinate (TSC) for treatment of intermittent claudication and diseases associated with hypoxia. Positive Phase 1b/2a data reported at AHA in 2010.

Discovery Labs - is reportedly engaged in partnership discussions with respect to licensing its neonatal franchise, which includes Surfaksin, Sufaksin LS and Aerosurf. Want a partner to collaborate on clinical development for Surfaksin LS and Aerosurf, and to play a central role in commercialization for all three products. Surfaksin is a synthetic KL4 Surfactant for treatment of neonatal RDS. Company expects to refile for approval in Q1 2011. Has granted development and marketing rights for Discovery Labs’ SRT products to Esteve in the key southern Europe markets of Spain, Italy, Portugal, Greece, and Andorra.

DSX Therapeutics - Developing a Mab that targets inducible nitric oxide synthase, which is involved in sepsis pathology. Pre-clinical program.

Focus Care Pharmaceuticals - Looking for partners in Europe and other geographical locations for its line of rapid oral rehydration salts.

UPDATE Infacare - Developing Stanosporfin (Stanate) for Neonatal Hyperbilirubinemia, which is in a Phase 2b trial. Company expects to report out data soon. (Link)
$ Microbix - Owns Urokinase, formerly of Abbott (Abbokinase). Did revenues of $10mm+ recently. Not formally for sale but purchased for a low price due to manufacturing issues which have largely been fixed. (Link)

Oxygen Biotherapeutics - Entering Phase 2b trials for Oxycyte in traumatic brain injury (TBI) in Switzerland and Israel. Company has moved forward to its second cohort in the trial. (Link)

Polymedix - PMX-60056 is a universal anticoagulant reversing agent, active against both heparin, low molecular weight heparin (LMWH) and pentasaccharide (Arixtra). Phase 1B complete with POC achieved, looking for global and local partners. (Link)

Serendex - inhaled rFVIIa for blast injury and lung bleeding. Six patient study showed high efficacy. Orphan designation granted. (Link)

NEW Undisclosed player - looking to partner a recombinant formulation of human serum albumin. Broad applications and advantages over blood derived product. For further details contact david.holbrook@torreyapartners.com.

DENTAL DRUGS

Array BioPharma - Oral p38 inhibitor has shown significant analgesic benefit in a recent Phase 2 trial in dental pain.

$ Pierrel Group - Received FDA approval in March 2010 for Articaine - a local dental anaesthetic that contains a thiophene ring. The thiophene ring of Articaine increases its lipophilicity and is highly diffusible allowing an effective tissue penetration.

NEW Sanifit - ASB 01 - OTC dental health / oral hygiene product inhibits formation of dental calcium deposits (tartar). In NDA filing phase.

NEW Undisclosed - Marketed dental drug with applications in the treatment of oral mucositis is available. Interested parties should contact tom.babich@torreyapartners.com.

NEW Undisclosed - German vertically integrated marketer of generic and branded pharma products with strength in cardiovascular, dental and veterinary medicines. Revenues of this company exceed €100mm.

DERMATOLOGY - AESTHETICS

$ Anika - Has rights to Elevess®, a hyaluronic acid dermal filler. Open to a partnering deal. The rights were recently returned to Anika and company has been modifying filler to address historical issues with the product.

Biolab - interested in partnering a variety of aesthetic products that are sold in Brazil. (Link)

BTG - Varisolve, a Phase 3 treatment for the removal of varicose veins. BTG now looking at commercializing this product in the United States. Other regions available. (Link)

$ Church & Dwight - Would sell some Del Pharma niche products.

Cosmo Pharma - CB-03-01, NCE anti-androgen for the topical treatment of Acne, Hirsutism and Androgenic Alopecia. Phase 2 studies showed a POC for acne. Recently showed nice POC in treatment of alopecia. (Link)

Fibrocell Sciences - Azficel-T is an autologous cell therapy for the treatment of moderate to severe nasolabial fold wrinkles in adults. Drug has been approved and launched. (Link)
Lipose  - Viafill fat transfer system on the market with applications in aesthetics where traditional volumizers are not well suited, particularly for the face and breasts. Company assisted by Torreya Partners. For details contact john.bradley@torreyapartners.com.

Lithera  - Announced positive results from a Phase IIb clinical study of LIPO-102, its novel injectable combination of salmeterol xinafoate (SX) and fluticasone propionate (FP) for selective, non-ablative fat reduction. In a Phase 2b study LIPO-102 was well-tolerated when administered weekly for 8 weeks into the subcutaneous abdominal fat of healthy subjects and produced dose- and time-related reductions in mean abdominal volume and circumference.

Pharmena  - bundle of dermatology products that are currently sold in Poland. These products are IP protected and well suited to either an OTC or physician office promotion setting. Looking for an international partner to commercialize. For further discussions contact Tom Bird of Torreya Partners at tom.bird@torreyapartners.com.

ScarGuard  - Could consider a company sale. Markets ScarGuard MD, a widely used scar remedy used by plastic surgeons. Also has OTC product.

Sinclair IS Pharma  - SPHR913 is designed to restore the quality of the skin by reducing the breakdown of collagen and elastin. (Link)

$ Suneva Medical  - Marketing Artefill, a long-acting dermal filler with impressive revenue growth. Open to a partnership or even a company sale. Update 12/2011: Company reports substantial revenue growth for the year and expects additional growth in 2012. (Link)

Topotarget  - Avugane contains the HDAC inhibitor VPA for use as a topical treatment of inflammatory skin diseases, including acne vulgaris (common acne), psoriasis and atopic dermatitis. Promising data from a double-blinded placebo controlled Phase 2. Looking to partner.

$ Undisclosed player  - Aesthetic dermatology business has been open to a sale with revenues over $80 million.

Valeant  - in a mid-July investor call, the CEO of Valeant indicated that he might consider a sale of the company’s aesthetic assets including the recently acquired Sculptra filler from Dermik. "Well, I think like everything, it depends what it’s worth to us versus what it’s worth to other people. I don’t think we are at critical mass in the aesthetics area," the CEO said.

DERMATOLOGY - MEDICAL

Anacor  - Looking for ex-U.S. partnerships for dermatology portfolio including preclinical and clinical compounds for psoriasis, tinea pedis, acne and atopic dermatitis. AN2728 is past POC stage and is in a Phase 2 trial for psoriasis and is expected to report in the first half of 2009. Based on these results, Anacor expects to initiate a Phase 2b dose-ranging trial for AN2728 in mid-2010. Also going into an extensive Phase 3 program for AN2690 for the treatment of onychomycosis. completed an IPO in Q4 2010. (Link)

Apricus Biosciences  - Running a process to outlicense NM100060 for onychomycosis. Has been in multiple Phase 3 studies. (Link)

Biofrontera  - BF-200 ALA, currently in European registration for the treatment of actinic keratosis. BF-200 ALA combines a nanoemulsion with 5-aminolevulinic acid (ALA). The product is developed in photodynamic therapy of precancerous skin lesions (actinic keratosis). Looking to partner. (Link)

NEW  - Burke Pharma - late stage product in development for the treatment of warts. Approved device to accompany pharmaceutical approach.
Creabilis - CT327 is a novel topically applied TrkA kinase inhibitor developed using Creabilis’ LSE (Low Systemic Exposure) technology. CT327 contains pegylated K252a, which interacts at a nanomolar level with tyrosine kinase receptor (TrkA), the receptor for nerve growth factor (NGF). It has strong analgesic activity and it acts by blocking NGF activity. Good results in Phase 2a psoriasis study versus placebo. Also positive data in study versus atopic dermatitis. High potential for the treatment of neuropathic pain. (Link)

$ Dusa Pharma - Main tool is PDT coupled with derm drugs. Revenues around $30mm. (Link)

Echo Therapeutics - 505b2 NDA application pending for Durhalieve (triamiconolone) for dermatoses. (Link)

Forward Pharma - Positive Phase 2 data on FP-187 for psoriasis. Would consider a sale. (Link)

Glenmark Pharma - Microsphere Adapalene + Clindamycin for acne was compared against Adapalene + Clindamycin in a standard gel formulation and had less irritation. Available for outlicensing.

COMPLETED Graceway - Could consider sale of products from 3M and has hired Lazard to explore alternatives through an ongoing process. Aldara for acitinic keratosis a key seller but was recently genericized. Update: Nov 23, 2011 - Medicis acquired Graceway for $455mm after the company filed for Chapter 11 bankruptcy on Sep 29, 2011.

Ibsa - Looking to outlicense betametasone valerate patch for treatment of psoriasis. A wide range of markets (EU, USA, South America, Middle and Far East) are still available on exclusive or semi-exclusive basis. Could do a global agreement. (Link)

$ Jina Pharma - Lipid based Amphotericin B Gel is indicated in acute, chronic and recurrent type of skin fungal infection and cutaneous leishmaniasis. Provides specificity to target fungal cells.

Labtec - LabiPatch adheres to the semi-moist environment of the lip and surrounding skin to deliver acyclovir for herpes sores. Looking for a licensee. Also has a patch for atopic dermatitis.

NEW Laurantis Pharma - Cis-UCA emulsion cream is a phase 2 stage topical dermatology product indicated for the treatment of atopic dermatitis. Preliminary efficacy has been seen in a controlled exploratory phase 2a study in patients with mild to moderate atopic dermatitis. A proof-of-concept phase 2b study with up to 170 patients with moderate to severe atopic dermatitis is ongoing. The study is expected to be completed in Q2/2012.

Mimetica - MTC896 as a topical gel for the treatment of excessive sebum production in subjects with acne and other skin conditions. MTC896 is a highly selective and potent antagonist (<10 nM) of the Melanocortin-5 Receptor (MC5R). The company hired William Blair in October 2010 to seek a company sale. (Link)

NanoBio - NB-002 for onychomycosis is in Phase 2 studies. (Link)

NitricBio - Nitric oxide gas in phase 2 studies for treatment of tinea pedis. Very promising opportunity with applications in the dermatology and podiatry markets. (Link)

NovaBiotics - Novexatin. NP213 is a cyclic arginine heptamer for onychomycosis showed strong positive results in a 48 patient Phase 2 study. NovaBiotics is currently looking to partner the product.

Oxygen Biotherapeutics - has introduced Dermacyte® line in dermatology including an oxygen concentrate pump and an oxygenating eye complex. (Link)

NEW Pergamum - Antimicrobial peptide DPK-060 to treat and prevent skin infections; lead indication skin infections (atopic dermatitis). Clinical Phase I/II, proof-of-concept study successfully completed. Currently preparations for two additional Phase 2 studies are ongoing.
Pharmena - bundle of dermatology products that are currently sold in Poland. These products are IP protected and well suited to either an OTC or physician office promotion setting. Looking for an international partner to commercialize. For further discussions contact Tom Bird of Torreya Partners at tom.bird@torreyapartners.com.

Piedmont Pharmaceuticals - Have a late stage product for treatment of head lice. Partnered and marketed in Europe. RESULTZ is sold internationally through licensing partners. Looking for other partners.

Provectus - Looking to sell or spin derm business including PH-10 for atopic dermatitis. Phase 2 completed.

Rovi - Nautiol is a Bemiparin-based product for the treatment of Diabetic Foot Ulcer. Recently finished a phase 3 in Europe with 300 patients and results were less than expected. Update: company announced on Dec 14, 2010 that it would no longer continue development of this product after looking at the Phase 3 data. (Link)

NEW $ Shunfeng Pharmaceutical, a Chinese topical skin care drug manufacturer is exploring a sale. Revenues around $35mm.

Sinclair IS Pharma - looking for a U.S. pharma partner to commercialize terbinafine spray for the treatment of Athlete's foot. Looking at a launch in 2014. (Link)

Third Stream Bioscience - Developing a novel skin antimicrobial based upon a chemical composition developed by Procter & Gamble. Promising data in dermatology (acne) and a variety skin cleansing applications. Hired an investment bank to find a buyer.

TOPICA - Conducting a U.S. Phase 2 trial of Luliconazole for patients with tinea pedis (athlete’s foot). Should work in onychomycosis as well. Interested in an exit in 18 to 24 months. Update: Company has entered into a license agreement for tinea pedis (Sep 2010) but the onychomycosis indication is available. (Link)

$ Undisclosed player - dermatology company with more than $40mm in revenue has hired a financial advisor to restructure its debt that likely exceeds intrinsic value of assets. Process has been underway for a month or two.

NEW $ Undisclosed player - seeking buyer for approved product for the treatment of head lice in the United States. Significant commercial traction. Interested parties should contact benj.garrett@torreyapartners.com.

DIABETES - ORALS

Array Biopharma - reported positive Phase 1b data with ARRY-403, an oral glucokinase inhibitor. (Link)

BHV Pharma - BHV091009 is a highly selective sodium glucose co-transporter 2 inhibitor ("SGLT2i") being developed for the treatment of diabetes and obesity. Two supportive Phase 2b studies. Also pursuing an obesity indication. (Link)

Genfit - GFT505 PPAR in Phase 2 for diabetes and cardiovascular disease. (Link)

Generex - Has right to a Metformin gum, may have a better side effect profile than metformin with rapid delivery.

Hanall - looking to license a 24 hour metformin. This would be a 505b(2) approval in the U.S. (Link)

Innocoll - see product for treating diabetic wounds in the wound care section of this report.

NEW Japan Tobacco - JTT-851. In Phase 1 with this GPR40 agonist. A program at Takeda following a similar mechanism has shown a powerful POC. Works to decrease blood glucose by stimulation of glucose-dependent insulin production. JT interested in partnering the ex-Japan rights to this product after achieving a POC result.
Lexicon Pharmaceuticals - Pursuing LX4211 for Type 2 diabetes. LX4211 is a once-per-day, orally-delivered, small molecule drug candidate that inhibits the sodium-dependent glucose transporter 2 (SGLT2), lowering the accumulation of glucose in the body and reducing caloric load. Very strong Phase 2 data with a 0.76 reduction in HBA1C seen in four weeks. Company in active discussions on this and two other molecules.

**NEW** Limerick Bio - developing oral treatment to improve glycemic control with a focus on NASH. In Phase 2. (Link)

**NEW** Poxel - promising phase 2 data in Type 2 diabetes for a novel metformin like treatment. Company open to a change of control transaction.

**NEW** Rhythm Pharma - RM-493 is a small peptide agonist with high specificity for MC4R. In preclinical studies, RM-493 induced dramatic reductions in food intake, body weight, and insulin resistance. RM-493 is advancing into human clinical trials as a potential new treatment for obesity and diabetes that reduces body fat and insulin resistance and improves cardiovascular function.

Transgeneron Therapeutics - Cтировation of pdx-1, a transcriptional factor that turns on the body’s beta cell generation process, for Type 1 diabetes. Pre-clinical stage.

Verva - VVP808, is a non-thiazolidinedione insulin sensitizer for use in the treatment of type 2 diabetes mellitus (T2DM). Verva is currently undertaking a phase 2a clinical proof-of-concept study of VVP808 at multiple sites in Australia. (Link)

**DIABETES - INSULINS / INJECTIBLES**

Adocia - HinsBet is a fast-acting human insulin product comprising of human insulin and one polymer of the BioChaperone platform. This forms molecular complex with human insulin to accelerate insulin blood penetration. Positive data versus Novolog have put this company into Phase 2 trials. (Link)

Alkermes - Inhalable insulin is available.

**NEW** Amylin - has purchased rights to Byetta® back from Eli Lilly. This GLP-1 inhibitor is expected to have $1 billion or more in revenues and has substantial ex-U.S. revenue. Amylin is searching for a commercialization partner outside of the United States.

Aradigm - Inhalable insulin is available. Nine complete phase 3 studies, excellent safety and efficacy. Essentially complete preclinical, clinical, and CMC packages. Strong IP generally in the area of inhalable insulins.

**NEW** BioCon - looking for partner for its late stage oral insulin project. Program missed endpoint in Indian studies.

Biodel - Looking to partner Linjeta®. completed two important phase 3 studies and has filed for FDA approval. Update: Company received a complete response letter and has indicated that may instead advance other programs forward in clinical development.

**NEW** Cebix - Developing C-peptide replacement therapy for the prevention of complications of diabetes in Type I patients. Company has completed Phase 1 studies and is exploring potential partnerships. (Link)

Camurus - CAM2036 is a convenient once-weekly GLP-1 product for treatment of diabetes type-II and obesity. Still in preclinical stage.

Conjuchem - announced that evaluating strategic alternatives including a sale of the company on Jan 19, 2010. Main assets including PC-DAC(TM):Exendin-4, a GLP-1 agonist in Phase 2 for the treatment of Type 2 diabetes and PC-Insulin, a long-acting basal insulin in preclinical testing.
Diobex - Actively selling its VLD (very low dose) glucagon and glucagon analogue program, for the treatment and prevention of hypoglycemia. USPTO recently issued IP covering this novel approach.

Enject - GlucaPen is an auto-injector pen containing glucagon. Looking to partner or M&A in 2010. (Link)

Flamel - has FT-105 - a basal insulin with a relatively flat PK curve. Appears to be better than Lantus. FT-105 is currently in phase 1 studies. (Link)

Generex - In a Phase 3 trial of an oral insulin, Generex Ora-Lyn that is already on the market in some countries. Has opened up a Phase 3 trial of this product, aiming for approval in Western countries. (Link)

Halozyme - Has a fast acting insulin technology. Very nice POC shown in a recent Phase 2 trial. (Link)

Hanmi Pharmaceutical - Pursuing HM11260C, a Phase 1 LAPS-Exendin4 analogue. HM11260C is a novel GLP-1 agonist for the treatment of Type 2 diabetes. HM11260C holds great potential for the world-first, once-monthly administration program among incretin mimetics under development.

**UPDATE** Intarcia - In talks to partner its diabetes program. ITCA 650 uses Duros to deliver Eli Lilly’s Byetta to patients. Very positive Phase 2 data with a presentation at ADA 2011. Company has gone forward into Phase 3 studies with the support and cooperation of Quintiles.

Mannkind - Looking to partner Afresa, an inhalable insulin, that has an upcoming PDUFA date. Rumored to be in an active M&A mode. Company received an approvable letter on Mar 15, 2010. The FDA asked for more information on data designed to support the clinical utility of Afrezza, as well as information about how comparable the commercial version of the product is to the version used in clinical trials.

Medisis - NP01 (a formulation of vanadium) improves insulin sensitivity leading to insulin sensitisation of peripheral tissues. As a consequence, glucose homeostasis is dramatically improved with better glucose uptake in insulin target tissues such as: skeletal muscle, liver and adipose tissue. Phase 1 trial complete. (Link)

Nektar - Would relicense EXUBERA - inhaled insulin. April 2008: Company stopped process due to apparent safety issues. (Link)

Thermalin Diabetes - Developing a variety of optimized insulin analogues for a variety of purposes. (Link)

Versartis - VRS-859, a long-acting exenatide. Positive Phase 1a data recently presented. Open to partnership / M&A. Also developing an IL-1, a glucagon and a HGH using Amunix pegylation technology and is currently in the IND stage. (Link)

**DIAGNOSTICS**

$ Abaxis - Physician office blood diagnostic machines - for sale. (Link)

H Biotest - In discussions to sell its medical diagnostics business consists of the Biotest Medical Diagnostics GmbH in Dreieich and the Biotest Diagnostics Corporation in Rockaway/ USA. (Link)

Ikonisys - Marketed oncoFISH Cervical for detection of LSILs, precursor of cervical cancer. Signed a marketing deal with Enzo. (Link)

Ikonisys - Leading automated platform for CTC (circulating tumor cell) detection. (Link)

Norgine - NRL972 is a liver disease detection diagnostic in Phase 2 clinical development in the US. NRL972 is a liver staging tool, currently in Phase 3 clinical development in Europe and under an IND in Phase 2 clinical development in the US.
RedPath Integrated Pathology - has cancer tests. Has public offer from ExonHit. Update: ExonHit withdrew the offer. Company would presumably consider other offers.

Source MDx - has prognostic, predictive and early detection molecular diagnostic assays and tests that measure RNA-transcript for cancer and other inflammatory diseases. Its lead test is targeting prostate cancer and is in Phase 3 trials. Has retained Wedbush to explore strategic options.

Sienna Diagnostics - Would consider a sale. Strong diagnostics for bladder cancer and for prostate cancer. (Link)

### DRUG DELIVERY

**NEW** AlteaTherapeutics - has agreed to shutter its operations according to a story published in the *Atlanta Business Chronicle* on Dec 9, 2011 (Link). Atlanta-based Altea Therapeutics Corp. was developing a proprietary, noninvasive method to deliver therapeutic proteins, conventional drugs and vaccines through the skin by creating “micropores” on the skin’s surface.

Bioject - Needle free delivery technology. Company exploring alternatives via Ferghana Partners. Extends supply agreement with Ferring pharma. (Link)

SCOLR Pharma - has developed a wide array of controlled release / immediate release products including products including ibuprofen, pseudophedrine, raloxefine, ondansetron, niacin and fenofibrate. Looking for partnerships with assistance from HealthPro Bioadvisors. (Link)

**NEW** Undisclosed player - player in drug delivery is searching for a merger or sale with assistance of a financial advisor. Company has expertise in both injectibles and controlled release solid dose. Substantial royalties and partnerships deals signed. Annualized revenue > $40mm.

Vyteris - has indicated that it is interested in disposing of a portfolio of pain products in development. These products include LidoSite®, an FDA approved product for the pretreatment of needle injection and venipuncture sites with Lidocaine (a related product is at Nuvo Research); a Phase 1 zolmitriptan patch and an NSAID patch. (Link)

### EMERGING MARKETS - PARTICULARLY BRAZIL, CHINA, INDIA, TURKEY DEALS

**NEW** Abdi Ibrahim Ilac - largest Turkey drug maker with revenues over $800mm. Reported in May 2011 that was in discussions to sell a strategic stake.

Amoun Pharmaceutical - An Egyptian company that manufactures off-patent branded generic formulations. It is one of the largest pharmaceutical companies in Egypt. It sells over 135 human products in over 275 forms. Of these products, 33 occupy the top 2 positions in their respective therapeutic categories and subcategories. Open to a company sale or strategic stake purchase. Reuters - Dec 6, 2010: “CVC is also preparing to sell Amoun, one of Egypt’s biggest drugmakers, people familiar with the matter told Reuters on Oct. 20. It owns Amoun with two other co-investors.” Bloomberg reported in Feb 2011 that the company has been looking for $1 billion in a sale price but that political upheaval in Egypt has hindered the sale.

**UPDATE** Biofarma - Biofarma for sale via JP Morgan. Reuters (12/6/2010): Citigroup's (C.N) venture capital arm and two co-investors have begun an auction of Turkish copycat drugmaker Biofarma, three people familiar with the matter said, in what could be Turkey’s biggest healthcare deal.” Update: A number of parties rumored to have looked at this asset but price ask was seen as prohibitive. As of Nov 2011 no sale had taken place.

**NEW** China Nuokang - ts lead products include Baquting for bleeding control, Aiduo, a cardiovascular stress imaging agent, and Aiwen, an anti-arrhythmic agent. The company has a value of $180mm. Biopharm Insight in November reported that this company hired Lazard for a sale process.
Clarins Life Sciences - Indian injectibles company has hired Rothschild to look at strategic options. Company has a rich pipeline of hospital generic injectibles using novel delivery methods. (Link)

Guangxi Golden Throat (Guang Xi Jin Sang Zi), a privately held manufacturer of healthcare products, is reportedly in sale talks. The company has annual revenues of around $47mm from its throat lozenges, which sell under the 'Golden Throat' brandname.

Huanghai Pharmaceutical - has been approached by interested bidders according to Biopharm Insight (Nov 15, 2011). It has a well-established products brand and sales network in the local Chinese market, thanks to its star product "Nifedipine" has 70% market share.

Mustafa Nevzat - Turkish generic pharmaceutical maker with revenues of approximately $250mm. According to Bloomberg, in talks to sell a strategic stake.

Undisclosed - Chinese specialty pharmaceutical company with strength in anti-infectives. Good EBITDA and revenue over $70mm in 2011. Torreya Partners assisting in sale of majority stake. For details please contact rodolphe.grepinet@torreyapartners.com.

Undisclosed player - Division of Indian generic company that is focused on oral solid dose preparations is for sale. Revenues over $300mm. Company has strength in formulation work and manufacturing. Ships product to numerous global locations.

Undisclosed player - Large pan-Asian drug company open to a sale. Update: Menarini acquires Invida Group on Nov 16, 2011. Price not announced but Invida a substantial business with more than $200mm in revenue.

Undisclosed player - a number of emerging markets players are developing portfolios of generic injectable drugs including cytotoxics and anti-infectives.

Undisclosed player - Large domestic generic player in emerging markets has expressed openness to a change of control transaction.

ENDOCRINE

Althea Technologies - has a promising phase 2 extended release version of human growth hormone in development. Previously this compound was at Genentech.

Ambrilia Biopharma - Long acting version of octreotide for acromegaly ready for market introduction in 2010. Large market opportunity. Company in bankruptcy. (Link) Recently agreed to extend licensing option agreement. There are still multiple partnership opportunities aviable.

Biopartners - In late stage trials with a sustained release version of human growth hormone. (Link)

Camurus - CAM2029 (octreotide chloride FluidCrystal® Injection depot) for treatment of acromegaly is in a Phase 2 trial against Sandostatin® LAR from Novartis.

Critical Pharma - CP016 is a long acting injection of somatropin (recombinant human growth hormone). CP016 is in its phase 1 of studies.

DuoCort - Plenadren contains hydrocortisone, a glucocorticoid receptor agonist. It delivers a more physiological dose of the active substance, better mimicking the body's own glucocorticoid serum profile combining rapid release and extended release characteristics. Plenadren is being developed as a dual-release once a day tablet, for the treatment Addison's disease (adrenal insufficiency). Sold on a named patient basis by Clinigen. Update: Company bought by Viropharma in November 2011. (Link)
Ibsa - Tirosint (L-Thyroxin) in soft gel capsules for treatment of hypothyroidism. Approved in the U.S. but not yet marketed. Company searching for a marketing partner. Ibsa - looking to outlicense betametasone valerate patch for treatment of psoriasis. A wide range of markets (EU, USA, South America, Middle and Far East) are still available on exclusive or semi-exclusive basis. Possibilities for a global agreement. (Link)

NEW $ Shunfeng Pharmaceutical, a Chinese topical skin care drug manufacturer is exploring a sale. Revenues around $35mm.

FIBROSIS

COMPleted Amira Pharmaceuticals - AM152, has completed Phase 1 studies of a drug candidate for fibrosis based on LPA1 target. Company interesting in pursuing IPF and scleroderma of the lung. Note: this company was bought by BMS in July 2011 for $350mm upfront plus milestones.

Angion Biomedica - in Phase 2 studies for BB3, an HGF mimetic for the treatment of hepatic fibrosis and to facilitate better outcomes in renal transplantation. The naturally-occurring cytokine hepatocyte growth factor (HGF), also known as scatter factor, is active in numerous tissues throughout the body, participating in the regulation of angiogenesis, organogenesis, tissue repair and neural induction. (Link)

Argentis - ARG201 in P2 for scleroderma. Some positive data but missed P2 endpoint at 12 months. (Link)

Capstone Therapeutics - AZX100 is a novel synthetic 24-amino acid peptide. Based on its demonstrated effects in pre-clinical models and safety in clinical trials it is in Phase 2 development for hypertrophic and keloid scarring with potential for treatment of pulmonary fibrosis and intimal hyperplasia. Data at year end 2010. Update: Dec 13, 2010 - company indicates that it missed the primary endpoint in the keloid scarring trial.

Catena - VPC51299, an orally available pre-clinical molecular, targets LPA GPCRs with high potency (also see Amira). These GPCRs elicit a signaling cascade upon LPA binding the receptor leading to LPA’s biological effects, such as proliferation, migration, angiogenesis and so on. (Link)

Conatus Pharmaceuticals - CTS-1027 an oral MMP inhibitor for liver disease with potential to treat liver fibrosis. Phase 2 study on treatment of hepatitis C patients underway. Results from this Phase 2 trial are forthcoming.

UPDATE $ Daval International - In Oct 2011, announced positive results from a Phase 2 of AIMSPRO in patients with Late Stage Established Diffuse Cutaneous Systemic Sclerosis (diffuse scleroderma). (Link)

COMPleted Excalliard Pharma - Has technology for topical application of antisense drugs to treat fibrotic diseases like scleroderma. Recent Phase 2 data showed EXC 001 treatment significantly reduced scar severity in subjects undergoing an elective abdominoplasty compared to placebo. Update: Company bought by Pfizer for an unannounced amount on Nov 22, 2011. (Link)

FibroGen - Would consider outlicensing FG-3019 anti-fibrosis compound. Novel mechanism based on CTGF. (Link)

Fibrotech - Has commenced manufacturing and non clinical toxicology for FT011, an antifibrotic for the treatment of diabetic nephropathy. Clinical trial due to commence in Q1 2012. (Link)

Galectin Therapeutics - developing drug candidates for the treatment of liver fibrosis based on Galectin modulation. These candidates are currently in preclinical stage. Company planning to file IND. (Link)

UPDATE Intercept Pharma - INT-747, an FXR modulator, for treatment of liver disease including primary biliary cirhosis and NASH. (Link) Phase 2 results were positive. Company in active partnership discussions.
Intermune - Bloomberg reports on April 27: “Biotechnology company InterMune Inc. known for its drug to treat lung scarring, hired Goldman Sachs (GS.N) to help it weigh a possible sale... Goldman has been conducting an auction of InterMune for more than a month and some potential bidders have been spooked by the biotechnology company’s expectations for a sale price, Bloomberg news reported.” Company commercializing Pirfenidone in Europe. Company market cap over $2bn.

NEW Phenex Pharma - completed Phase 1 on an FXR agonist for liver fibrosis and NASH. See Intercept Pharma for a similar program. Open to business development deals.

Promedior - Developing recombinant human Serum Amyloid P Component for the prevention and treatment of fibrotic pathology. PRM-151 in Phase 2a trials for prevention of post-surgical scarring in glaucoma patients. Would consider a corporate sale and is currently in active partnership talks after raising an additional $12 million.

STROMEDIX STX-100 is being developed for the treatment of chronic allograft dysfunction in kidney transplant recipients. Also exploring IPF indication. Humanized monoclonal antibody to integrin αvβ6, going into Phase 2.

NEW Vernalis - V85546 - Phase 2-ready novel selective anti-inflammatory compound that selectively inhibits MMP12 and has in-vivo efficacy in pre-clinical models of Chronic Obstructive Pulmonary Disease (COPD), Multiple Sclerosis (MS) and liver fibrosis. Phase I SAD and MAD studies have been conducted. Substantial safety and tox package would support up to 6 month dosing in Phase II. Worldwide rights available. (Link)

GASTROINTESTINAL

4SC - 4SC-101 in Phase 2a trials for Crohn’s disease. 4SC-101 contains vidofludimus, a novel, selective and orally available, small molecule inhibitor of dihydroorotate dehydrogenase (DHODH), which interferes with cell proliferation through blocking the synthesis pathway of pyrimidines, thereby halting the proliferation of rapidly multiplying cells, in particular of lymphocytes which are involved in the pathology of autoimmune disorders.

Adeona Pharmaceuticals - outlicensing CORRECTA™, a retention enema formulation of the widely used topical antifungal agent clotrimazole, for the treatment of acute refractory pouchitis. Completing a Phase 2 study. (Link)

Ajinimoto - AJM300 is an alpha-4 or beta-7 integrin inhibitor, which is being developed for the treatment of Crohn’s disease. This product is in Phase 2 studies.

Albireo - Positive IBS-c Phase 2 data on A3309 which modulates the enterohepatic circulation of bile acids by inhibiting the Intestinal Bile Acid Transporter (IBAT). Company starting Phase 3 studies. (Link)

Alevium - Long acting PPI. Solves a number of problems with omeprazole and Nexium.

Alvine - Enzymatic treatment for celiac disease. Currently in a Phase 2a clinical trial. (Link)

AM-Pharma - Has achieved early POC results in the treatment of ulcerative colitis with alkaline phosphatase. (Link)

Ardelyx - RDX5791 is a systemic NHE3 (sodium/proton exchanger type 3) inhibitor which increases intestinal sodium leading to enhanced interstitial fluid volume and transit. RDX5791 is being developed as capsule for the treatment of constipation predominant irritable bowel syndrome (IBS-C).

Aryx Therapeutics - ATI-7505, an improved cisapride like molecule, for reduction of GERD, constipation and dyspepsia. Update: Feb 19, 2010: Company retained Cowen to explore strategic options. Dec 15, 2010: “Over the course of the strategic process ARYx initiated earlier this year, the most significant interest, even in the absence of a binding offer, was shown in ARYx's gastrointestinal product candidate, naronapride (ATI-7505), demonstrating the potential value of the asset. Also, interactions with the US Food and Drug Administration ("FDA") in April 2010 substantially clarified the remaining clinical development requirements for the compound. As a result, the lead
investors in ARYx encouraged the company to seek substantial additional funding to continue the development of naronapride internally, and such funding has been actively pursued since late summer without final resolution.**Company close to default on debt. Update: March 2011 - company went into a wind down of its operations.**


Bioprojet - Dexecadotril is selective inhibitors of nephrilysin (NEP) which exhibits intestinal antisecretory action. Dexecadotril is being developed for the treatment of acute diarrhea in children and is in Phase 3 studies. (Link)

**NEW Cancer Prevention Pharmaceuticals** - seeking a ROW partner for its combo of efomithine and sulindac. In Phase 3 studies for familial adenomatous polyposis (FAP).

ChiRhoClin - Secretin is a polypeptide hormone having 27 amino acids produced by S cells of the duodenum. Secretin is being developed as intravenous infusion for the treatment of pain due to chronic pancreatitis. (Link)


**NEW Cosmo Pharma** - looking for a partner for low molecular weight heparin derivative that is used to control ulcerative colitis. Impressive Phase 2 dataset supports the story.

**NEW Cubist** - recently acquired Adolor and open to partnering rights to Adolor products in Asia. Included is ADL5945 for the treatment of opioid induced constipation. This product has completed Phase 2 studies. Interested parties should contact aaron.pelta@cubist.com.

**COMPLETED Cytokine Pharma Sciences** - CPSI-2364 is an orally active form of the synthetic guanyl hydrazone semapimod. CPSI-2364 inhibits signal transduction pathways that produce pro-inflammatory cytokines like TNF-alpha, IL-1, IL-6 and nitric oxide. CPSI-2364 is being developed as an oral formulation for the treatment of ERCP-induced pancreatitis and is in Phase 2 studies. Update: Company acquired by Ferring on October 24, 2011.

Edusa Pharmaceuticals - In Phase 2 studies with Pumosetrag, a 5-HT3 partial agonist that works locally within the upper GI tract, is being developed to treat GERD symptoms in patients who continue to experience heartburn and regurgitation while on PPIs or H2-antagonists. (Link)

Embil - Would outlicense Kortos cream for hemorrhoids and anal fissures. (Link)

EryDel - EryDex contains dexamethasone sodium phosphate. Dexamethasone is a glucocorticoid agonist which binds with high affinity to specific cytoplasmic receptors. This results in modification of transcription hence, protein synthesis in order to achieve inhibition of leukocyte infiltration at the site of inflammation. EryDex is being developed as intravenous infusion using EryDel technology for the treatment of crohn's disease. In Phase 3 studies. (Link)

Evoke Pharma - **EVK-001**, an intranasal metoclopramide, is currently in Phase 2b for the treatment of the symptoms associated with diabetic gastroparesis. (Link) Product registration will occur following a pending Phase 3 clinical trial.

**NEW Furiex** - developing MuDelta which was recently returned by J&J. Company reached an agreement with FDA for a Phase 3 trial of MuDelta in diarrhea-predominant irritable bowel syndrome (IBS-D) after an End-of-Phase 2 meeting with the agency. Interested parties should contact Sailash.Patel@furiex.com. (Link)

Genzyme / Sanofi - Outlicensing **RDP58** (Delmitide), a clinical-stage D-amino acid decapptide with established anti-inflammatory properties. Proof of concept for this product opportunity has been demonstrated in models of inflammatory bowel disease (IBD).
Hutchison MediPharma - HMPL-004 has completed two global phase 2 clinical trials in IBD and ulcerative colitis. A 223-patient global Phase IIb trial for the treatment of ulcerative colitis ("UC") showed a decrease in rectal bleeding and an excellent safety profile. Company actively looking for a partner to pursue Phase 3 studies. (Link)

Hyperion Therapeutics - Developing GT4P, an ammonium remover, for urea cyclic disorders and hepatic encephalopathy - Positive Phase 3 data and a high likelihood of approval in 2012. (Link)

Index Pharmaceuticals - Kappaproct®, a nuclear factor NF-kappa-B p65 subunit oligonucleotide has completed its third clinical phase 2 trial for the treatment of steroid resistant/dependent ulcerative colitis patients and is entering a phase 3 trial during 2011. (Link)

Lexicon Pharmaceuticals - Pursuing LX1031 for IBS. Lexicon completed a Phase 2 clinical trial of LX1031 in patients with non-constipating IBS in November 2009. Update: Currently pursuing LX1033, a more potent compound which is near the IND stage.

Lipid Therapeutics - looking for a U.S. partner for LT-02 with strong positive Phase 2b data for Phosphatidylcholine derivative to treat 5-ASA resistant ulcerative colitis. Potential for approval with a single Phase 3 study.

Menarini - ibudutant, a tachykinin NK2 receptor antagonist for IBS. In phase I clinical studies in humans, the drug was safe and well tolerated, showing good PK. Now in Phase 2 studies. (Link)

Meritage Pharma - Positive Phase 2b data on effect of oral viscous budesonide (OVB) an oral formulation of budesonide for the potential treatment of patients with eosinophilic esophagitis (EoE).

Moberg Derma - A-Fizz is in preclinical development for the treatment of chronic anal fissures.

NPS Pharma - developing GATTEX for the treatment of short bowel syndrome. Well advanced in clinical development. Recently saw some deaths of subjects on study. NPS has indicated interest in commercializing this product on its own.

Ocera - Development of a novel carbon sorbent for mild hepatic encephalopathy and IBS, as well as the NCE, OCR-002, for acute liver failure. Company to report out Phase 2b data for hepatic encephalopathy compound soon. Active business development discussions underway.

Ono Pharmaceutical - Has completed Phase 1 studies with ONO-2952, a TSPO antagonist for the treatment of IBS. An ex-Japan partnership transaction is possible.

OxThera - Oxazyme is recombinant oxalate degrading enzyme for the treatment of kidney stones. No data reported from a pending study in some time. A related compound is at Althea Technologies. (Link) (Noncon)

Paion - Looking to outlicense CNS7056 based on the available Phase 2 data for the drug as a short-acting intravenous anesthetic/sedative for colonoscopy. Positive data were reported out in Nov 2009.

Palau Pharma - Currently undertaking a Phase 2 clinical trial with Derslazine sodium for mild to moderate ulcerative colitis. Looking for a partner to assist with later stage trials.

Pharmos Corporation looking to partner Dextofisopam for diarrhea predominant and alternating diarrhea and constipation irritable bowel syndrome. Positive in Phase 2a and missed endpoint in Phase 2b but activity seen.

Raqualia Pharma - In Phase 2 with a reversible inhibitor of gastric H+/K+-ATPase for GERD. Likely superior to current proton pump inhibitor (PPI) therapies because of rapid onset, long duration and the absence of a food effect. Going into Phase 2. (Link) (Noncon)
NE W Rhythm Pharmaceuticals. RM-131, a novel ghrelin agonist, is effective in restoring normal gastric function in animal models of delayed gastric emptying owing to a direct prokinetic effect. This compound is in Phase 1 trials with a focus on gastroparesis.

NE W Ritter Pharma - RP-G28 for lactose intolerance has completed a Phase 2a study. A multi-center randomized, double-blinded, placebo-controlled parallel group trial using a novel short-chain galacto-oligosaccharide (RP-G28) enrolled 61 proven lactose intolerant maldigesters with the aim of improving lactose digestion and tolerance. Lactose malabsorption (LM) was determined by breath hydrogen. Daily dosing with RP-G28 resulted in a significant reduction in breath hydrogen production (p=0.01), peak hydrogen production (p=0.03) and in symptoms of abdominal pain (p=0.01), flatulence (p=0.05), abdominal cramping (p=0.01) and gurgling (p=0.03) after a 25 g lactose challenge.

Romark - Pursuing Nitazoxanide for C diff associated disease, rotavirus and hepatitis C. (link)

Rose Pharma - GLP1 for IBS. Positive data. Compound from Lilly. Company open to a sale transaction.

NE W $ Salix - looking for a European partner for RELISTOR, a subcutaneous treatment for opioid-induced constipation. This was recently partnered in Asia to Link Healthcare.

UPDATE Shield Therapeutics - ST10-021 is a stable complex of ferric iron in an oral formulation for the treatment of iron deficiency anemia associated with inflammatory bowel disease. This drug is in Phase 3 testing. IDA affects approximately 73% of patients with ulcerative colitis or Crohn’s disease globally. (link)

NEW Sigmoid Pharma - In Phase 2 for CyCol for Ulcerative Colitis. Targeted release of pre-solubilised immunosuppressant for local GI release and activity. No systemic absorption. Therefore, a convenient, efficacious and safe alternative to steroids, immunomodulators and biologics.

UPDATE SLA Pharma - Has developed a formulation of diltiazem for the treatment of anal fissures. This product is in Phase 3 studies and is licensed to Ventrus Bioscience for the US market. Ventrus data likely in Q2 2012. SLA has rest of world rights. (Link)

SLA Pharma - Has developed Eicosapentaenoic acid (EPA) is an omega-3 polyunsaturated fatty acid, taken as a gastro-resistant oral capsule, for the treatment of Familial Adenomatous Polyposis (FAP). Phase 3 clinical study data demonstrates a significant reduction in rectal polyp number in subjects with familial adenomatous polyposis who had previously undergone colectomy and ileal-rectal anastomosis. (Link)

Soligenix - has partnered orBec/BDP with Sigma-Tau in the U.S. Looking to partner in ROW. Indication is GI manifestation of acute GVHD, thereby reducing the need for systemic immunosuppressive drugs to treat GI GVHD. Company is running a confirmatory trial and indicates a partnership is most likely after results are in. (Link)

UPDATE Synergy Pharma - Synergy presently has a drug, plecanatide, in clinical development to treat chronic constipation (CC) and constipation-predominant irritable bowel syndrome. Has shown positive Phase 2a data. Compare to Ironwood / Forest compound linaclotide. Update: Nov 2011 - raised $15mm for further trials. (Link)

Theravance - 5-HT4 receptor agonist compound, TD-5108, is for the treatment of chronic constipation and other disorders related to reduced gastrointestinal motility. Strong positive Phase 2 data. Update: “ (CEO indicated on Sep 29) in talks with several companies regarding a partnership, but he is very open to speaking with additional companies”

Thorne - PreBiox for the prevention of constipation and diarrhea associated with use of antibiotics. Extensive Phase 2 data.

Tioga - Asimadoline from Merck KGaA. Phase 2b IBS data were positive. In Phase 3 studies. Rights to certain Asian countries in-licensed by Ono in September 2009. (Link)
Tranzyme - **TZP-102** is an agonist of ghrelin receptors and acts as a GI prokinetic agent in Phase 2a studies. Strong data were seen. Also, TZP-101, is an injectible ghrelin agonist being evaluated in two concurrent Phase IIb trials for the treatment of acute indications, severe gastroparesis and post-operative ileus (POI) and are still looking for partners.

**NEW** Undisclosed player - two early stage GI drugs from a large pharma company are available for partnering.

**NEW** Undisclosed player - highly effective product for ulcerative colitis. 80%+ remission rates seen in recent clinical study. Company looking for commercialization partner.

**UPDATE** Ventrus - Have iferanserin for **hemorrhoids** with a good data package. Enrolling a Phase 3 study which will report out in Q2 2012. Company has gone public and raised over $70mm in capital to finance and obtain approval for its top two programs. Product has potential revenues in excess of $1 billion. ([Link](#))

Xenoport - **XP19986** is a prodrug of the R-isomer of baclofen. Baclofen is a generic drug that has been shown in investigator-led studies to be effective in the treatment of GERD. Interested in partnering this drug and is in phase 2.

**NEW** Yuhan Corporation - YH4808 is a Potassium-Competitive Acid Blocker (P-CAB) with characteristics of potent, sustained inhibition of gastric acid secretion with faster onset. Unlike PPIs, YH4808 does not require acid-activation which resulted in rapid increase in stomach pH. Therefore, fast symptom relief in patients expected. Positive Phase 1 data. ([Link](#))

Zealand Pharma - Looking to partner **ZP1848** for IBD which is completing Phase I development. ZP1848 is a SIP modified novel GLP-2 peptide analogue with enhanced stability and efficacy. Company has excellent medicinal chem and development capabilities. Would consider an M&A transaction. ([Link](#))

**GENERICS**

Actavis - Has restricted its debt and company performing well. While no formal process is underway the company could be open to a strategic transaction in next several years.

Amoun Pharmaceutical - An Egyptian company that manufactures off-patent branded generic formulations. It is one of the largest pharmaceutical companies in Egypt. It sells over 135 human products in over 275 forms. Of these products, 33 occupy the top 2 positions in their respective therapeutic categories and subcategories. Open to a company sale or strategic stake purchase. Reuters - Dec 6, 2010: “CVCI is also preparing to sell Amoun, one of Egypt’s biggest drugmakers, people familiar with the matter told Reuters on Oct. 20. It owns Amoun with two other co-investors.” Bloomberg reported in Feb 2011 that the company has been looking for $1 billion in a sale price but that political upheaval in Egypt has hindered the sale.

**NEW** Apotex - looking for ex-Canada licensees / commercial partners for its large portfolio of generic products. ([Link](#))

Biofarma - Biofarma for sale via JP Morgan. Reuters (12/6/2010): Citigroup's (C.N) venture capital arm and two co-investors have begun an auction of Turkish copycat drugmaker Biofarma, three people familiar with the matter said, in what could be Turkey's biggest healthcare deal.” Update: A number of parties rumored to have looked at this asset but price ask was seen as prohibitive.

$ Claris Life Sciences - Indian injectibles company has hired Rothschild to look at strategic options. Company has a rich pipeline of hospital generic injectibles using novel delivery methods. ([Link](#))
CNS Therapeutics - has introduced Gablofen, an AP rated intrathecal version of baclofen for control of severe spasticity among patients with movement disorders. This product has significant advantages over the existing marketed product and is likely to have significant revenue traction over the next several years. (Link)

UPDATE Covidien Pharmaceuticals - According to the New York Times on June 7, 2011 “Covidien, the health care company spun out from Tyco four years ago, may seek to sell its pharmaceutical unit…” This division of Covidien (formerly Mallinckrodt) has a major business selling pain products (both branded and generics) and imaging products. Revenues are around $2 billion. Update: As of December 2011 no sale has taken place. Company is rumored to be interested in a sale of the whole business (rather than pieces) for a full price. YE 2011 numbers reported on Nov 15, 2011 and were robust (sales up 9% yoy) with strong performance in generics.

UPDATE Hi-Tech Pharmacal - Market rumors in April 2011 that company could be purchased. As of December 2011 no transaction had taken place of this manufacturing company of generic liquids and ointments. The company has delivered strong earnings throughout 2011 and is trading at close to twice the price in Dec 2011 it had earlier in 2011.

NEW Huanghai Pharmaceutical - has been approached by interested bidders according to Biopharm Insight (Nov 15, 2011). It has a well-established products brand and sales network in the local Chinese market, thanks to its star product "Nifedipine" has 70% market share.

Ibsa - Tirosint (L-Thyroxin) in soft gel capsules for treatment of hypothyroidism. Approved in the U.S. but not yet marketed. Company searching for a marketing partner. Ibsa - looking to outlicense betametasone valerate patch for treatment of psoriasis. A wide range of markets (EU, USA, South America, Middle and Far East) are still available on exclusive or semi-exclusive basis. Possibilities for a global agreement. (Link)

NEW Jubilant Pharma - has a list of generic oral solid pharmaceuticals in development that are available for licensing for Europe and the U.S. (Link)

NEW Labormed - Romanian manufacturer of generic drugs is interested in finding global licensing partners for a series of generic products (Link)

NEW Niche Generics - Looking for partners for its long list of generic products that have been developed. Subsidiary of Unichem. (Link)

NEW Par Pharmaceuticals - Relational Investors filed a 13D showing 8.7% ownership of this company on November 25, 2011. In the 13D Relational indicated: “Despite these opportunities for improvement, the Reporting Persons believe that the Company may continue to trade at discounted prices because of industry challenges and the Company’s sub-optimal size and product scope. If the discount persists, the Reporting Persons believe that, in keeping with sound stewardship principles, the Company’s board will be required to consider broad strategic alternatives. Specifically, the Reporting Persons are confident that substantial cost savings could be achieved in a transaction with a strategic buyer.” Note: there is no evidence that Par Pharmaceuticals has received offers or is open to receiving such offers at present.

Stada - Chief executive Hartmut Retzlaff indicated an openness to takeover offers after the sale of Ratiopharm.

Undisclosed generic player - Looking for a partner for a portfolio generic biologics in development. Wants to retain manufacturing rights.

Undisclosed player - a number of emerging markets players are developing portfolios of generic injectable drugs including cytotoxics and anti-infectives.

Undisclosed player - Large domestic generic player in emerging markets has expressed openness to a change of control transaction.
Undisclosed player - U.S. company with one approved product and a rich pipeline of other high value injectable generic products is looking for either a marketing partner or a company buyer.

**COMPLETED** Undisclosed player - U.S. generic player with approximately $200mm in net revenues and strength in drug delivery solutions would consider a company sale. Update: Par acquires Anchen Pharmaceuticals for $410mm in cash on Aug 24, 2011.

**NEW** Undisclosed - Chinese specialty pharmaceutical company with strength in anti-infectives. Good EBITDA and revenue over $70mm in 2011. Torreya Partners assisting in sale of majority stake. For details please contact rodolphe.grepinet@torreyapartners.com.

**NEW** Undisclosed player - U.S. generic player with approximately $250mm in net revenues and strength in solid dose manufacturing would consider a company sale.

$ Undisclosed player - sale of company with over $10mm in revenue with largely genericized specialty products in CNS and renal disease.

**NEW** Undisclosed Player - U.S. generic company with approximately $90mm in gross revenue is searching for a buyer with the assistance of a financial advisor. Company has substantial presence in medicines for cough & cold, women’s health and pediatrics.

**NEW** Undisclosed player - Division of Indian generic company that is selling its oral solid dose preparations business. Revenues over $300mm. Company has strength in formulation work and manufacturing. Ships product to numerous global locations.

**NEW** Undisclosed Player - U.S. generic company with more than $100 million in revenues is for sale. Company has a significant branded business and a manufacturing facility.

**NEW** Undisclosed Player - U.S. generic company with more than $40 million in revenues is for sale via Torreya Partners. Company has a significant pipeline, high growth and a fully developed operating platform. Interested parties should contact tom.babich@torreyapartners.com.

**NEW** Undisclosed - German vertically integrated marketer of generic and branded pharma products with strength in cardiovascular, dental and veterinary medicines. Revenues of this company exceed €100mm.

**NEW** Undisclosed player - U.S. generic company with revenues over $100mm but weak profitability is considering a sale transaction.

Undisclosed player - several portfolios of ANDAs including a group of six solid dose ANDAs on infrequently genericized products (generally through one bio study) and a portfolio of around 20 solid dose/liquid ANDAs on more frequently genericized products.

Undisclosed player - U.S. generic player with approximately $25mm in revenues and an interesting pipeline is running a sale process.

Undisclosed player - U.S. generic player with approximately $30mm in revenues and some manufacturing capacity would consider a company sale deal.

**NEW** USV - offering a biogeneric PTH. Teriparatide is a recombinant form of N-terminal 1-34 amino acids of human parathyroid hormone which is a 84 AA protein. Approval pending in India.
GOUT

**UPDATE** Ardea Biosciences - RDEA806 oral for HIV and gout with good Phase 1b efficacy data. RDEA594 is the metabolite that reduces uric acid. RDEA594 has completed Phase 2 studies with positive results and has been evaluated in over 250 subjects. Company proceeding with Phase 3 trials.

**UPDATE** Biocryst - BCX4208 is a next generation purine nucleoside phosphorylase (PNP) inhibitor with the potential for once-a-day dosing suitable for chronic administration. With its novel mechanism of action, BCX4208 has the potential to address unmet medical needs across a broad spectrum of inflammatory diseases, including gout with positive Phase 2 data. Company reported additional positive Phase 2 data in November 2011.

3SBIO / EnzymeRx - Developing Uricase-PEG 20 to treat gout (see Savient). In a Phase 1 study. Company in a sellside process. Update: Company sold global rights to 3SBIO of China for $6.25 million in November 2010. Note that 3SBIO is planning to find a development partner for this product outside of China. ([Link](#))

Metabolex, Inc., a biopharmaceutical company focused on the discovery and development of proprietary novel medicines for the treatment of metabolic diseases, announced in May 2011 that it has initiated a Phase 2 clinical trial of arhalofenate (MBX-102), its product candidate for the management of hyperuricemia in patients with gout.

Nuon Therapeutics - Developing tranilast for gout with strong positive Phase 2 data reported at EULAR 2010. ([Link](#))

Pharmos - Data from Phase I studies in healthy volunteers using S-Tofisopam showed lowering of uric acid. Company open to a change of control transaction. Also developing a Phase 2 product for GI disorders.

**UPDATE** Savient Pharmaceuticals - FDA approved KRSTEXXA (pegloticase) in Sep 2010, a PEGylated uric acid specific enzyme indicated for the treatment of chronic gout in adult patients refractory to conventional therapy. Company is seeking a commercial buyer and is using JP Morgan and Lazard in its search for an acquisition partner. Savient is now pursuing a launch of Krystexxa on its own and is building a 50-person plus sales force. Update: First year sales were $2.6 million. Market Cap of $160mm. ([Link](#))

Topotarget - Inflammasome Inhibitor is a protein scaffold and an interleukin 1 (IL-1) inhibitors are being developed for the treatment of gout.

Undisclosed - Private company has a number of promising NCEs in development for the management of hyperuricemia.

HAIR / SCALP

Advagen - Marketing OTC products that stimulate hair growth by inhibiting FGF-5 on the scalp. Based on research from Australian company Cellmid, Ltd. ([Link](#))

Cosmo Pharma - CB-03-01, NCE for the topical treatment of Acne, Hirsutism and Androgenic Alopecia, is in phase 2 studies. Recently showed nice Phase 2 POC in treatment of alopecia. Open to a partnership. ([Link](#))

Follica - Company is developing technology that stimulates development of hair follicles. ([Link](#))

Histogen - Histogen, Inc. announced the one year data findings of its Hair Stimulating Complex (HSC) pilot clinical trial. Statistically significant new hair growth was seen in HSC-treated subjects at this follow-up timepoint, one year after their single treatment with HSC.

Jina Pharma - MORR-F solution contains minoxidil and finasteride, which on topical application reduces falling of hair and stimulate hair growth in individuals with alopecia. Efficacy shown. ([Link](#))
Manhattan Pharmaceuticals - Likely 2011 approval for Hedrin, a treatment for head lice. Hedrin is the top selling head lice product in Europe. ([Link](#))

Moberg Derma - K301 for seborrhic dermatitis has shown benefit in two Phase 3 clinical trials. Recently the clinical studies were completed and now are looking for licensing.

Nidus Laboratories - Developing a short Fas-disabling peptide mimetic for topical therapy of hair loss.

Piedmont Pharmaceuticals - Have a late stage product for treatment of head lice. Partnered and marketed in Europe. [RESULTZ](#) is sold internationally through licensing partners. Looking for other partners.

R-Tech Ueno - Announced that the Phase IIa clinical study of RK-023 to treat androgenetic alopecia has been completed by January 21, 2011.

Topaz Pharma - completed two Phase 3 studies for the treatment of head lice with Ivermectin. Planning to submit NDA to FDA in 2011. ([Link](#))

NEW $ Undisclosed player - seeking buyer for approved product for the treatment of head lice in the United States. Significant commercial traction. Interested parties should contact benj.garrett@torreyapartners.com.

**HEARING / EAR DISORDERS**

13Therapeutics - Developing P13 as a treatment for Acute Otitis Media (AOM). Many colds in young children are accompanied by ear infections. P13 is an orally available anti-inflammatory 20 amino acid peptide derived from a viral regulatory protein. ([Link](#))

Adherex - In Phase 3 development of sodium thiosulfate for treatment of hearing loss associated with Cisplatin use. And is still looking for a partner. ([Link](#))

UPDATE Auris Medical - AM101 is a small molecule, non-competitive antagonist of NMDA receptors that selectively blocks NMDA receptors in the cochlea. AM101 is being developed as parenteral formulation for the treatment of acute inner ear tinnitus. Phase 3 study planned for 2012 following positive data. ([Link](#))

Desitin - studying Travistal in tinnitus. On market in U.S. but potential for exclusivity surrounding indication.

Foresight Biotherapeutics - Has recently completed a Phase 3 trial of FST-201 (dexamethasone 0.1% ) Otic Suspension vs. the FDA-approved drug Ciprodex (ciprofloxacin 0.3%, dexamethasone 0.1%) Otic Suspension (Alcon Laboratories, Inc.) in the treatment of acute otitis externa. ([Link](#))

NEW Octoplus - developing OP-145, a therapeutic peptide for the treatment of chronic middle ear infection.

Otonomy - Searching for an ex-U.S. partner for a dexamethasone gel for Meniere’s disease which affects 600,000 people in the U.S. Going into Phase 1 with POC data expected in mid-2011. ([Link](#))

Sound Therapeutics - going into Phase 2 studies of a product to reduce hearing loss from chemotherapy. ([Link](#))

**HEMATOLOGY**

UPDATE Abiogen - Neridronate is an amino-bisphosphonate used in Metabolic Osteopathy and has gone into Phase 3 trials. Also being studies for patients with thalassemias. ([Link](#))

Ablynx - ALX-0081 is a Nanobody targeting von Willebrand Factor (vWF), to reduce the risk of thrombosis in patients with acute coronary syndrome (ACS) and thrombotic thrombocytopenic purpura (TTP). Through Phase 1b. Phase 2 data are expected.
Adventrx- ANX-188 is a novel, purified, rheologic and antithrombotic compound initially being developed as a first-in-class treatment for pediatric patients with sickle cell disease in acute crisis. Ready for Phase 3 studies and open to partnering deals.

AesRx - Aes-103, is a small molecule (Da 126) discovered by researchers at Virginia Commonwealth University. It works by increasing the affinity of sickle hemoglobin for oxygen. (Link)

Akebia - Positive Phase 2 with a HIF modulator for the treatment of anemia. Originally developed at P&G Pharma. Open to a licensing deal in but could consider other possibilities including a change of control. Company expects to report a second Phase 2 trial dataset in March 2012. (Link)

Alders Biopharmaceuticals - Phase 2 data from ALD518 investigational antibody therapeutic that targets interleukin-6 (IL-6) demonstrate a reversal of anemia in patients with advanced non-small cell lung cancer (NSCLC). After 12 weeks of treatment with the anti-inflammatory therapeutic, 58 percent of patients who received ALD518 experienced hemoglobin level increases from less than 11 g/dL to more than 12 g/dL, while no patients receiving placebo experienced this increase. Also saw improvements in lean body mass and reductions in fatigue. Note: this antibody is partnered to BMS for all indications except cancer. (Link)

Amsterdam Molecular Therapeutics (AMT) - Hemophilia B - very promising results from a gene therapy trial to treat Hemophilia B which is due to a deficiency of Factor IX. Update: In Nov 2011 the company indicated that it will be focusing resources on the development of this product. (Link)

AOP Orphan Pharma - P-1101 contains pegylated interferon alfa-2b (PEG-P-INF alpha-2b), a conjugation of recombinant interferon alfa-2b with monomethoxy polyethylene glycol which shows antiviral and immunomodulatory effects. P-1101 is being developed for the treatment of polycythemia vera. A Phase 1b study is underway.

Biotest - a major global player in plasma proteins (IGs, coagulation factors) and antibodies (for inflammation) had revenues in 2009 of 440mm EUR. Company was reported by Barron’s as a takeover target in Feb 2010.

Bluebird Bio - Positive Phase 1b type data for LentiGlobin® for gene therapy treatment in a young adult with severe betathalassemia, a blood disorder that is one of the most frequent inherited diseases. Also has positive data for a treatment for Adrenoleukodystrophy (ALD) is a rare, inherited neurological disorder.

Catalyst Biosciences - developing improved proteases for hemophilia and inflammation. A Factor VII program has been partnered to Wyeth but a Factor IX program which is in a preclinical stage is company owned at present.

Cellerant - Developing a novel, cell-based medicine (Myeloid Progenitors / CLT-008) as a treatment for chemotherapy- and radiation-induced neutropenia as well as for Acute Radiation Syndrome. (Link)

Cleveland Biolabs - Open to partnering a preclinical stem cell mobilizer. Partnered in China. (Link)

Clinuvel - In Phase 3 for European approval for Afamelanotide, a photoprotectant to be used in Erythropoietic Protoporphyrina. Update: Company looking to partner in EU first and then the U.S.

Emisphere - has developed a rapid release Vitamin B12 which is on the market. Upcoming studies to show relative efficacy of this product which would likely be marketed as a medical food.

GlycoMimetics - GMI-1070 is active in several models of diseases in which leukocyte adhesion and activation plays a key role, including vaso-occlusive crisis of sickle cell disease. In Phase 2 studies. Company will consider strategic options after completion of studies. Update: In October 2011 Pfizer entered into a licensing pact for up to $340 million with Glycomimetics. (Link)
Green Cross - Developing Intravenous Immune Globulin (IVIG). In Phase 3 in Korea. Recently went forward with an IND in the United States. Extensive evidence supports use of this blood product to treat a variety of conditions including Alzheimers disease. (Link)

**UPDATE** Hemaquest - Like Prometic below, exploring use of fatty acids and derivatives for the treatment of hematologic disease. In a randomized multi-dose Phase 2 study of HQK-1001 in patients with sickle cell disease with an interim data read expected soon. Recently appointed a new CEO and moved company to San Diego. (Link)

Incode BioPharmaceutics - **HC3-1496** results in enzymatic depletion of the complement protein C3, the key component for all three pathways of complement activation. Preclinical and applicable for oncology, PNH and RA.

**NEW** Japan Tobacco - Has Phase 1 HIF inhibitor for the treatment of anemia. Prefers to partner non-Japan rights after achieving proof of concept.

**UPDATE** Medgenics - Medgenics has **EPODURE** with promising Phase 1b data showing efficacy in controlling anemia without the cost of EPO. At ASN in Nov 2011 reported data which showed EPODURE treatment elevated hemoglobin levels and maintained >9 g/dl for >3 months in 12/13 patients and >6 months in 7 /13 patients, with the longest >30 months. Open to a partnership transaction.

**UPDATE** Noxxon - Developing NOX-A12, an inhibitor of SDF-1 or CXCR12. This is a chemokine that is a key regulatory element in the homing and retention of hematopoietic stem cells in the bone marrow. SDF-1 binds with high affinity to the chemokine receptors CXCR4 and CXCR7. The CXCR4/SDF-1 axis has been shown to play a role in stem cell mobilization, vasculogenesis, tumor growth, and metastasis. In Phase I studies reported on Dec 12, 2011 with healthy volunteers single doses of NOX-A12 up to 10.8 mg/kg and daily doses up to 2 mg/kg for five days were found to be safe and well tolerated and resulted in dose-dependent mobilization of white blood cells and CD34+ cells as predicted by preclinical studies. (Link)

Palkion - Developing HIF modulators for anemia using molecules developed by Crystal Genomics. (Link)

**UPDATE** Polyphor - CXCR4 antagonist, **POL6326** for hematological stem cell mobilization. In a Phase II clinical trial for transplantation of autologous hematopoietic stem cells in multiple myeloma patients after chemotherapy. Outlicensing opportunity. Similar to AnorMed Mozobil now controlled by Genzyme. (link)

Prometic - Exploring partnership options for **PBI-1402** for treatment of anemia.

**UPDATE** Shield Therapeutics - ST10-021 is a stable complex of ferric iron in an oral formulation for the treatment of iron deficiency anemia associated with inflammatory bowel disease. This drug is in Phase 3 testing. IDA affects approximately 73% of patients with ulcerative colitis or Crohn’s disease globally. (Link)

SuppreMol - Developing soluble Fcy-Receptors (sFcyRs) for autoimmune disease. These are recombinant autologous proteins with strong immunosuppressive potential. SM101, SuppreMol’s main product is a recombinant, soluble, non-glycosylated version of the human Fcy receptor FyRlb which is has completed a Phase 1 trial for ITP. In Phase 2 studies in ITP and going into further studies for lupus. (Link)

**UPDATE** Symphogen - Rozrolimupab (Sym001) is a recombinant polyclonal composition of 25 different Rhesus D specific antibodies for the treatment of primary Immune Thrombocytopenia and for Anti-RhD prophylaxis (ADP) in prevention of Hemolytic Disease of the Newborn. This product was returned to Symphogen from Biovitrum Swedish Orphan for strategic reasons on Dec 30, 2010. Phase 2 data presented at ASH on Dec 12, 2011 showed that rozrolimupab exhibited a favorable safety profile and induced a rapid increase in blood platelets in patients with Immune Thrombocytopenia Purpura (ITP). (Link)

TaiGen - **G-0054** is a potent and selective CXCR4 receptor antagonist. This molecule rapidly mobilizes stem cells and progenitor cells from the bone marrow into peripheral circulation. (Link). Related drugs in development at Chemokine Therapeutics and Cleveland Biolabs.
UPDATE Tarix Pharmaceuticals – Positive Phase 2 data with TXA-127 for the prevention of chemotherapy induced thrombocytopenia. Ongoing Phase 1b studies of this drug in hematological transplant. TXA-127 has much broader applications in hematology, respiratory disease and fibrosis.

Therapure - TBI 304 is a monoclonal antibody that mimics the natural ability of hemoglobin to stimulate stem cells to produce red blood cells. TBI 304 is in the preclinical stage. (Link)

Thrombogenics - TB-402 is a novel human antibody which partially blocks Factor VIII, an essential blood clotting factor. Reported positive Phase 2 data and a Phase 2b study is underway. ThromboGenics and its partner BioInvent plan to out-license TB-402 for its later stage development and commercialization once new data arrive. (Link)

HEPATOLOGY

Alfact Innovation - ALF-5755 has been shown to promote cell survival after apoptotic or oxidative stress, and liver cell regeneration in primary cultures. ALF-5755 is being developed as slow intravenous infusion for the treatment of acute liver failure. Recently granted orphan designation. (Link)

Alfama - In a preclinical stage of testing CORMs to treat acute liver failure. (Link)

UPDATE Antipodean Pharma – Phase 2b study for MitoQ which contains mitoquinone mesylate, a synthetic form of coenzyme Q10. It is a mitochondria targeted antioxidant that selectively blocks mitochondrial oxidative damage and prevents cell death. MitoQ is being developed by MitoQ Technology as an oral formulation for the treatment of liver inflammation with the intention of use for treatment to lower AST’s and ALT’s.

NEW Asklepieon - Cholic acid is an orphan drug that is a form of replacement therapy for children with a series of inborn errors of bile acid metabolism manifesting as otherwise fatal cholestatic liver disease. This product is at the Phase 3 stage.

UPDATE Biolex - Locteron reported Phase 2b studies in March 2011 for a long-acting interferon for Hepatitis C. Because of its lower dosing, less depression was noted than with Peg-INTRON. On Mar 15, 2010 reported data indicating that flu-like symptoms were much reduced with this compound versus Peg-INTRON and also showed improved antiviral efficacy. (Link)

Conatus Pharmaceuticals - CTS-1027 an oral MMP inhibitor for liver disease with potential to treat liver fibrosis. Phase 2 study on treatment of hepatitis C patients underway, so far the results have been positive.

NEW Genfit - FXR agonist in Phase 2. Proof of efficacy and safety of GFT505 have been obtained in Phase I and Phase IIa trials (400 patients or healthy volunteers treated with GFT505 to date). The absence of safety concern has been confirmed in a full toxicological package up to 2-year carcinogenicity studies.

HAC Biomed - a cell therapy company has very promising data for a treatment for the repair of damaged liver tissue. Commercial stage in Germany with market entry in other territories soon. Assisted by Torreya Partners. Interested parties should contact tom.bird@torreyapartners.com.

Hyperion Therapeutics - Developing GT4P, an ammonium remover, for urea cyclic disorders and hepatic encephalopathy - Positive Phase 3 data and a high likelihood of approval in 2011/12 timeframe. Would consider a partnership or sale transaction. (Link)

Intercept Pharma - INT-747, an FXR modulator, for treatment of liver disease including PBC and NASH. (Link) Phase 2 results were positive.

NEW NasVax Ltd. - In a Phase 2a clinical trial in 36 subjects with NASH (Nonalcoholic steatohepatitis) or “fatty liver” and the metabolic syndrome, oral aCD3 antibody immunotherapy was generally very safe and induced positive trends in blood levels of two enzymes that are biomarkers for liver inflammation. (Link)
Norgine - NRL972 is a liver disease detection diagnostic in Phase 2 clinical development in the US. NRL972 is a liver staging tool, currently in Phase 3 clinical development in Europe and under an IND in Phase 2 clinical development in the US and are looking for partnering options in US and Japan.

Ocera - Development of a novel carbon sorbent for mild hepatic encephalopathy and IBS (AST-120), as well as the NCE, OCR-002, for acute liver failure. Phase 2b data for hepatic encephalopathy support application of product. Active business development discussions underway.

NEW Phenex Pharma - completed Phase 1 on an FXR agonist for liver fibrosis and NASH. See Genfit and Intercept Pharma for similar programs. Open to business development deals.

### HOSPITAL PRODUCTS

Acusphere - Imagify, pending EMA filing for this cardiac imaging agent. Highly differentiated from SPECT agents on the market insofar as permits evaluating of myocardial perfusion, an important marker of coronary artery disease (CAD) without radioactive markers. Potential first-to-market drug in $600 million and $2 billion addressable market in E.U. and U.S. respectively. Recent SPA from FDA in US. Will require one further trial for FDA approval. Company is assisted by Torreya Partners. For details contact peter.garrambone@torreyapartners.com (Link)

Adams Pharmaceuticals - Launching Epinephrine Injection USP 1:1000 (0.3mg Pre-Filled Single Dose Syringe) (i.e.: Epinephrine Injection PFS) to compete as a low cost alternative to the well known brand EpiPen®. Company was recently unsuccessful in a “go public” merger with La Jolla Pharmaceuticals.

UPDATE $ AMAG - Feraheme IV iron product - Recently approved. Company is commercializing on its own. AMAG’s recent merger attempt with Allos was ended in November 2011. On Nov 17, 2011, AMAG announced that it had hired Jefferies to explore all opportunities to enhance shareholder value. Frank Thomas, interim CEO of AMAG indicated: “We will expeditiously complete this process, which will include a parallel review of a potential sale of the company and other strategic merger and acquisition transactions.”

COMPLETE Artisan Pharma - ART-123 for sepsis in Phase 2b. Recently approved in Japan. Company was acquired in November 2011 by Asahi Kasei Pharma.

Aklepion - L-Citruline for the 20 percent of children who have heart surgery with use of the bypass pump develop pulmonary hypertension, or high blood pressure in the lungs. In early studies this product appears to prevent pulmonary hypertension from developing. Now in Phase 3 studies. (Link)

Avera Pharma - Gantacurium, a short-acting neuromuscular blocker, has successfully completed a Phase 2 clinical study, where it was used as an adjunct to general anesthesia to enable rapid intubation of patients undergoing surgery. Looking to partner.


Cara Therapeutics - CR845, a selective kappa opioid agonist, has completed a Phase 1 study. Phase 2 studies were positive. Specifically, CR845 provided evidence of analgesic efficacy when administered as a single intravenous dose to women following laparoscopic hysterectomy. In addition to decreases in reported pain levels, patients receiving CR845 required substantially lower amounts of postoperative opioids for 16 hours, and showed a significant reduction in the incidence of postoperative nausea. See a similar molecule in testing by Tioga Pharmaceuticals (GI section). (Link)

$ Claris Life Sciences - Indian injectibles company has hired Rothschild to look at strategic options. Company has a rich pipeline of hospital generic injectibles using novel delivery methods. (Link)
Cohera Medical - Developing TissueGlu, a deep wound adhesive for use in surgical applications.

DSX Therapeutics - Developing a Mab that targets inducible nitric oxide synthase, which is involved in sepsis pathology. Preclinical program.

FCB-Pharmicell - Cerecellgram is a bone marrow derived stem cell composition, containing mesenchymal stem cells and cells specifically useful for brain regeneration. Cerecellgram is being developed for the treatment of acute ischemic stroke. In a Phase 3 randomized clinical trial. (Link)

Focus Care Pharmaceuticals - Looking for partners for its line of rapid oral rehydration salts. (Link)

Genervon Biopharmaceuticals - Recruiting participants for a Phase 2 double blinded, randomized, placebo controlled dose escalation study to evaluate the efficacy and the safety of GM602 in patients with acute middle cerebral artery ischemic stroke within an 18-hour treatment window. GM602 is an endogenous six amino acid neuropeptide with trophic (regeneration) and tropic (guidance) effects on the nervous system. (Link)

Maruishi Pharma - MR04A3 is a novel isoindoline hypnotic, binds to the central benzodiazepine (BZD) binding site of the GABA A receptor (gamma-aminobutyric acid) and acts as an agonist. It is a sedative and analgesic which has antinociceptive effect. MR04A3 is being developed as an intravenous formulation to induce anesthesia during surgery and is in a Phase 1b trial.

NoNO - seeking a partner with the capability to develop and commercialise NA-1 (a PSD95 inhibitor) for acute ischemic stroke (AIS).

Novabay Pharmaceuticals - Aganocide compounds (broad spectrum antimicrobial activity) for a variety of topical applications like treatment of acne, decolonization of MRSA from the nares, and catheter-associated urinary tract infections. NovaBay Pharmaceuticals and Galderma SA tweaked a March development deal for skin condition dErugs, defining terms and fees and providing for an additional tolerance study. (Link)

Optimer - Promising Phase 3 data for Prulifloxacin in infectious diarrhea. Favorable comparison versus ViroPharma’s vancomycin. Open to a partnership transaction for this drug following the recent approval of Dificid (fidaxomicin) by the FDA.

Pacira Pharmaceuticals - Looking to partner Exprarel, a long acting bupivacaine, outside of the U.S. This product was approved by the FDA on Oct 31, 2011. Interested parties should contact Darren Pincus at DarrenP@pacira.com.

PharmaSurgics - In Phase 2 development for a pharmaceutical for anti-adhesion treatment after surgery. Very promising approach. (Link)

Polymedix - Finished Phase 1 with a Factor Xa antitode that reverse effect of heparin and associated compounds. Proof of concept achieved. (Link) Also, see Portola for a related Factor Xa antitode. (Link)

ProFibrix - Developing a surgical tissue sealant that stops acute and severe bleeding. FibroCaps are a novel powdered mixture of fibrinogen and thrombin. Phase 2 clinical testing is currently ongoing in the Netherlands where Fibrocaps is used for the treatment of the mild to moderate bleeding during liver surgery. ProFibrix expects to finalize the study in the beginning of 2010.

Salix - looking for a European partner for RELISTOR, a subcutaneous treatment for opioid-induced constipation. This was recently partnered in Asia to Link Healthcare.

Undisclosed - Company with a portfolio of marketed hospital injectibles has been in an M&A sellside process.
Undisclosed player - looking to partner a recombinant formulation of human serum albumin. Broad applications and advantages over blood derived product. For further details contact david.holbrook@torreyapartners.com.

$ Undisclosed - marketed hospital product available on a co-promotion basis for the prevention of acute allergy.

$ Undisclosed player - approved hospital anesthetic in the United States with differentiation from existing products. Also could be used in physician office setting where sedation required. Open to a product sale or other value creating arrangement. Global rights available.

Undisclosed - Phase 2 hospital product available for licensure for the treatment of acute allergy in the ER setting.

$ Undisclosed - antifungal with revenues > $10mm. Hospital setting is where generally used.

$ Undisclosed - pharma company is open to divesting a marketed specialty cardiology product with revenues > $30mm per annum.

$ Undisclosed - Several products for oncology supportive care in the hospital setting.

NEW Ventria - has developed a recombinant lactoferrin for the prophylaxis and treatment of infection in prematurely born children. Positive POC dataset for this Phase 2 product.

Zurex - Zuragen, Prevention of catheter related bloodstream infections. Phase 3 with FDA discussions ongoing.

**IMMUNOLOGY / INFLAMMATION / AUTOIMMUNE DISEASE**

4SC - 4SC-101 in Phase 2b trials for RA. This oral IL-17 inhibitor will see data in 2011. Multiple indications possible.

AB Science - In Phase 2 studies for Masitinib in RA. Promising efficacy data in a single arm study but some challenging side effects. ([Link](#))

NEW Ablynx - reported on November 5, 2011 that it regained rights ATN-103 a Phase 2 nanobody treatment for rheumatoid arthritis based on TNF-alpha modulation. Ablynx may develop this program itself or partner out. ([Link](#))


Allostera - Developing oral peptides that block signals replacing certain antibodies. Preparing Phase 1 studies of an allosteramer which targets IL-23R for the treatment of inflammation and psoriasis. Similar mechanism as Ustekinumab.

Anaphore - ATX3105, blocks the receptor complex engaged by interleukin-23 (IL-23), an immunoregulatory protein that has become a key target in strategies to develop better therapies for autoimmune disorders. This preclinical drug candidate is being prepared for an IND. ([Link](#))

Angelini - Bindarit inhibits mcp-1/CCL2. A Phase 2 clinical pilot study in lupus nephritis (LN) patients demonstrated that subject treated with bindarit showed a significant reduction of urinary albumin excretion (UAE) and urinary MCP-1/CCL2 levels. Promising data in diabetic nephropathy. Going into Phase 3 studies. ([Link](#))

Anthera Pharmaceuticals— In Phase 2b for A623, an anti-BLyS compound for treating lupus. Has passed POC stage but company is now dealing with a technical problem with some of its vials used in the study. ([Link](#))

Aquinox Pharma - AQX-1125 modulates SHIP which controls PI3K for the treatment of cancer and inflammatory disease. Late preclinical.
Ardea Biosciences - **RDEA806** oral for HIV and gout with good Phase 1b efficacy data. RDEA806 has successfully completed Phase 1 and Phase 2a studies and has been evaluated in over 250 subjects. **RDEA594** is the metabolite that reduces uric acid.

**UPDATE** Avila - In mid-Phase 1 for a BTK inhibitor that is highly selective and orally dosed. Btk plays a critical role in the development and activation of B cells, and its inhibition will be of therapeutic significance in the treatment of both of B cell-related hematological cancers (e.g. non-Hodgkin lymphoma (NHL) and B cell chronic lymphocytic leukemia (B-CLL)), and autoimmune diseases (e.g. rheumatoid arthritis). High interest in this company, confirmed by the recent partnering deal between J&J and Pharmacyclics. Reported some Phase 1 data at ASH on Dec 13, 2011. Among the CLL patients in the highest dose arm completed in Phase 1 studies (4 of the 6 subjects), there changes in circulating lymphocyte levels were noted that are consistent with the clinical response seen by the Pharmacyclics product. **[Link]**

Biocon - Would consider a partnership for its anti-CD6 humanized antibody, **T1h**. Has completed a Phase 1 study in RA and has two Phase 2 studies underway.

Biotest - looking to partner BT-061 once it has Phase IIb proof of concept (POC) data in the lead rheumatoid arthritis. A 300 patient Phase 2b trial is slated to start shortly. Biotest is interested in retaining EU rights.

Biotie - Biotie initiated two clinical studies in rheumatoid arthritis and psoriasis patients with its fully human VAP-1 monoclonal antibody. Phase 1b studies were supportive of efficacy showing improvements in DAS28 versus placebo. **[Link]**

Catalyst Biosciences - developing improved proteases for hemophilia and inflammation. A Factor VII program has been partnered to Wyeth but a Factor IX program which is in a preclinical stage is company owned at present.

Cellzome - Has several PI3K kinase modulators in development to address RA and asthma. PI3K is an emerging target for inflammatory diseases. PI3K is a dual lipid-protein kinase, which represents one of four isoforms of class I phosphatidylinositol-3-kinases. Company in active partnership discussions.

Chelsea Therapeutics - In talks to partner antifolate drug **CH-4051** for RA.

**NEW** Forward Pharma - Positive Phase 2 data on FP-187 for psoriasis. Would consider a sale. **[Link]**

Genzyme - Looking to outlicense Genz-29155, a novel, small molecule, orally bioavailable, 1x daily novel inhibitor of TNF-α signaling. Proof of concept has been demonstrated in multiple models of transplantation rejection, multiple sclerosis (MS), sepsis, inflammatory bowel disease (IBD) and lupus. **[Link]**

**NEW** ImmunPharma In October 2011, ImmunPharma regained worldwide rights to Lupuzor™ for lupus due to the merger of Cephalon with Teva Pharmaceutical Industries. ImmunPharma intends to advance discussions with pharmaceutical companies for the licensing of Lupuzor™. Lupuzor™ has completed successfully phase I, phase IIa and phase IIb and has recently been granted approval by the FDA to commence phase 3 and has also been designated “Fast Track”. **[Link]**

Isotechnika - Voclosporin, an oral **Calcineurin** inhibitor, for transplant and psoriasis has achieved good POC. Recently did a China deal. **[Link]**

**NEW** Italfarmaco - Givinostat is a Phase 2 HDAC inhibitor for inflammatory diseases and cancer. Has been in Phase 2 for juvenile arthritis, myeloproliferative diseases, Hodgkin’s disease and multiple myeloma.

Kiadis - ATIR is a personalized cell based therapy of donor T-lymphocytes depleted of alloreactive T-cells and is infused after a patient receives a mismatched bone marrow transplantation to reduce Transplant Related Mortality. Has shown effectiveness in a recent Phase 2a study.
Lexicon Pharmaceuticals - In Phase 2 studies in RA with a LX-2931, a S1P lyase modulator. Strong pre-clinical data package and a desire to partner this compound in 2010.

Micromet - Willing to outlicense a preclinical IL-2 inhibitor (MT-204).

Morphosys - MOR103 is a fully human HuCAL antibody against GM-CSF that is in Phase 1 studies. Also see a similar antibody in development at Kalobios. (Link)

Neovacs - TNFalpha Kinoid in Phase 2a study in RA. TNF-alpha Kinoid is an immunotherapy designed to elicit natural polyclonal antibody responses. Positive data were reported out.

Novimmune - In Phase 2 with an anti-CD3 antibody for Crohn’s disease. Exploring potential as an immunomodulator in Type 1 diabetes and transplant rejection as well.

Nuon Therapeutics - Developing tranilast for gout and RA. In discussions with potential partners. (Link)

Opsona Therapeutics - In preclinical development of an anti-TLR Mab for treatment of inflammatory diseases such as RA and lupus. (Link)

Phenex Pharma - in preclinical work for a ROR - gamma - t program for treatment of inflammation. High interest in this program.

Phytomedics - Partnering PMI-001 for RA based upon a botanical. Phase 3 development plans have commenced. Solid ACR50 scores in a Phase 2 study. JSB Partners advising.

Portola - Early stage SYK inhibitor program (PRT062607) for cancer and immunology. Initiated a Phase 1 ascending dose trial in March, 2011 of PRT062607, an Syk-specific kinase inhibitor to treat chronic inflammatory diseases and certain cancers, including non-Hodgkin’s lymphoma and chronic lymphocytic leukemia. Drawing high interest after Rigel data.

Resolve Therapeutics - in preclinical studies for a biologic, RSLV-125, that targets the interferon pathway. This molecule acts at the most proximal point in the interferon cascade. Potential to be an efficacious and safer therapy than other products in development. (Link)

Rigel - partnering R348 is a selective, potent inhibitor of Janus Tyrosine Kinase 3 (JAK3). JAK3 is critical to immune system activation and is an attractive target because its expression is limited to key cells in the immune system, particularly T-cells, which mediate these diseases.

Savient Pharmaceuticals - FDA approved KRYSTEXXA (pegloticase) in Sep 2010, a PEGylated uric acid specific enzyme indicated for the treatment of chronic gout in adult patients refractory to conventional therapy. Company is seeking a commercial buyer and is using JP Morgan and Lazard in its search for an acquisition partner. Savient is now pursuing a launch of Krystexxa on its own and is building a 50-person plus sales force. Update: First year sales were $2.6 million. Market Cap of $160mm. (Link)

SuppreMol - Developing soluble Fcy-Receptors (sFcyRs) for autoimmune disease. These are recombinant autologous proteins with strong immunosuppressive potential. SM101, SuppreMol’s main product is a recombinant, soluble, non-glycosylated version of the human Fcy receptor FyRIIb which is has completed a Phase 1 trial for ITP. (Link)

Syntrx Biosystems - As a folate analogue, aminopterin competes for the folate binding site of the enzyme dihydrofolate reductase, thereby blocking tetrahydrofolate synthesis. Aminopterin is being developed as an oral dosage form for the treatment of psoriasis and is in Phase 2 studies.

Taligen - Developing a Factor H (TT30) replacement, part of the complement system, for orphan diseases.
**NEW** Undisclosed - highly promising early stage JAK3 program.

Veloxis - [LCP-Tacro](#) has completed Phase 2 studies with positive data in kidney transplant recipients. 50Sb2 with better PK of tacrolimus. Other transplant products available.

Western States Biopharmaceuticals - Developing novel treatments for autoimmune disease. ([Link](#))

Y's Therapeutics - [YSPSL](#) is fused P-selectin glycoprotein ligand (PSGL) and human IgG1. It acts as an antagonist of P-selectin. This is currently in Phase 2 studies for prevention of delayed graft function and prevention of IRI in transplant patients.

Zalicus - Synavive® low dose glucocorticoid treatment for RA without previously noted side effects of this class. Has shown ACR20 score of 63% in a Phase 2 trial with this oral treatment. Potentially an attractive treatment. ([Link](#))

### LATE STAGE ASSETS (PHASE 3 STARTED TO NEWLY APPROVED)

Access Pharmaceuticals - undertaking a commercial launch of Mugard which was approved in 2010. This product is used for treating oral mucositis. Access is actively looking for a co-promotional partner for this product. June, 2011 received acceptance letter from Chinese SFDA citing all documentation for MuGard, indicated for treatment of oral mucositis a side effect of anti-cancer treatments, has been submitted and accepted. ([Link](#))

Acusphere - Imagify, pending EMA filing for this cardiac imaging agent. Highly differentiated from SPECT agents on the market insofar as permits evaluating of myocardial perfusion, an important marker of coronary artery disease (CAD) without radioactive markers. Potential first-to-market drug in $600 million and $2 billion addressable market in E.U. and U.S. respectively. Company is assisted by Torreya Partners. For further details please contact peter.garrambone@torreyapartners.com ([Link](#))

**UPDATE** Alexza - Looking to partner several inhaled products including ADASUVE (Loxapine) which recently met the primary endpoint in a Phase 3 Bipolar Disorder trial. A Phase 3 study in schizophrenia was successful. Product was partnered to Biovail and recently returned. Promising opportunity. Update: Dec 8, 2011: FDA advisory committee documents somewhat negative on pulmonary safety of this product but committee voted in favor its approval.

**UPDATE** Amarin - Developing a pure omega-3 for reduction of triglycerides. Phase 3 data reported out very strong. Company has indicated that it has retained a financial advisor (Lazard) to explore a sale. Update: Nov 2011 - no sale reported and company’s valuation has dropped from over $2bn to under $1bn. Amarin recently filed an NDA for its lead product. Amarin appears to be a likely takeover candidate for the next year. ([Link](#))

Amsterdam Molecular Therapeutics (AMT) - Glybera for lipoprotein deficiency. This disease is serious, often resulting in death and quite rare (one in a million). Assuming 500 patients in the Western world with the disease and a treatment cost of $200k per annum per patient, this drug would generate annual revenues of approximately $100 million. AMT has not yet filed this product with the FDA. Has filed an EMA registration for Glybera to treat lipoprotein lipase deficiency. Update Update: Recently failed to get an EMA approval for this product. May need to run an additional trial. ([Link](#))

Anthera Pharmaceuticals — Varespladib is an inhibitor of secretory phospholipase for prevention of arteriosclerosis. Promising data and other molecules. In an ongoing Phase 3 program. Also in Phase 2b with a different compound for lupus. ([Link](#))

AP Pharma - Would outlicense [APF530](#) in Phase 3 for CINV. Positive Phase 3 data. The FDA has accepted for review the NDA and, based on the Prescription Drug User Fee Act (PDUFA), has issued an action date of March 18, 2010. Update: AP received a complete response letter that required additional studies on bioavailability and metabolism. Company preparing a complete response in mid 2011. ([Link](#))
ARCA - Gencaro (Bucindolol) is a nonselective beta-blocker which is being developed for treatment of heart failure on a genetically-targeted basis. Very strong data in preventing death post-MI. Approvable letter from FDA with guidance on a further trial required for approval. Company open to alternatives. (Link)

Archimedes Pharma - is seeking licensees for North America and Japan for PecFent, a nasally-delivered fentanyl product for breakthrough cancer pain, currently in Phase 3 development. Archimedes Pharma is seeking licensees outside of Europe for PecFent®. Has gained a positive opinion from the CHMP, and has been filed for regulatory approval in the US. Preparing for a U.S. launch.

NEW $ BioAlliance Pharma - searching for a U.S. Partner for Oravig. Oravig is miconazole buccal tablets for the treatment of oropharyngeal candidiasis (OPC), more commonly known as thrush, in adults and children age 16 and older. This drug was returned by Strativa Pharmaceuticals recently to BioAlliance.

UPDATE BioDelivery Sciences - running a fully enrolled Phase 3 clinical trial assessing the efficacy and safety of BEMA Buprenorphine for the treatment of moderate to severe chronic pain. In September 2011, BDSI reported that it had missed the primary endpoint of improving mean pain intensity scores vs. placebo in the Phase 3 BUP-301 trial to treat moderate to severe chronic low back pain. As a result, BioDelivery plans to conduct a second Phase 3 trial for the product, which the company said will delay an NDA submission to FDA by about one year. (Link)

Biosante - LibiGel (testosterone gel) for female sexual dysfunction is in Phase III, and is designed to be quickly absorbed through the skin after a once-daily application.

Biovest International - Company emerged from Chapter 11 bankruptcy. Has several assets including BioxID which has recently had positive Phase 3 data in NHL.

Camurus - Episil® (CAM2028) is a protective, bioadhesive intra-oral liquid for treatment of oral mucositis. The product is registered in Europe as a Medical Device, Class I, with an expected market launch in Q2 2010. Note: This product was licensed to IS Pharma in Europe after its recent approval. A 510k registration submission in the US is under way.

NEW $ Canyon Pharmaceuticals - Canyon Pharmaceuticals is seeking to build a strategic alliance preferentially on a worldwide basis to commercialize Desirudin (Iprivask® US-registration / Revasc® EU-registration), a differentiated anticoagulant drug which is approved by the FDA, the EMA and several of the rest of world authorities. Desirudin is a direct thrombin inhibitor and the only subcutaneous direct thrombin inhibitor (DTI) with approval for venous thromboembolism (VTE) prophylaxis following hip- and knee-replacement surgery.

Chelsea Therapeutics - NORTHERA™ (droxidopa), is an orally active synthetic precursor of norepinephrine initially being developed for the treatment of neurogenic orthostatic hypotension. Large potential in the Parkinson’s market where there has been a reported 60% reductions in falls in PD patients with NOH; also could work in fibromyalgia. On market already through Dainippon Pharma in four Asian countries. Company recently reported that it is filing for an NDA based on studies that have already been completed and has recently completed its QTc work. Anticipates approval by Q2 2012.

Clinuvel - In Phase 3 for European approval for Afamelanotide, a photoprotectant to be used in Erythropoietic Protoporphyria. Data expected in Q1 2011. May 12, 2011 Clinuvel Pharmaceuticals Limited., announced that it held a constructive Pre-Submission Meeting with the European Medicines Agency (EMA) on May 5. After reviewing the proposed content of the registration dossier for afamelanotide (Scenesse), the EMA acknowledged that Clinuvel would meet all filing requirements.

Collegium Pharma - NDA pending COL-003, a tamper resistant, abuse-deterrent, sustained release oxycodone formulation. Seeking a partnership.

Durect - Transdur Sufentanil for the treatment of pain. Longer duration than fentanyl patches and smaller patch size. On May 5, 2011 the company wrote: “We continue discussions with potential partners regarding licensing development and commercialization rights to this program to which we hold worldwide rights.”

Elite Pharmaceuticals - Phase 3 abuse resistant oxycodone for OA under an SPA. Company exploring strategic options.

**UPDATE** Exelixis - According to Bloomberg on April 12, 2011: “Exelixis Inc. is working with Goldman Sachs Group Inc. to prepare for potential takeover offers after its experimental drug helped prostate-cancer patients in a study.” Company’s XL-184 has reported dramatic data on reducing metastatic prostate lesions at ASCO. Update: company has hired a Chief Commercialization Officer with intention to introduce cabozantinib to the U.S. market and has reported strong data for caboazanitinib in the treatment of medullary thyroid cancer.

**NEW** Endoceutics - developing Femivia for the treatment of issues associated with hormone deficiency in post-menopausal women (e.g., memory loss, diabetes, muscle loss). This product is in Phase 3. (Link)

Fibrocell Sciences - Emerged from Chapter 11 bankruptcy proceedings on Oct 6, 2009 (formerly known as Isolagen). Company received a complete response letter from FDA requesting additional histopathological data from the trial of azficel-T for the treatment of wrinkles. Azficel-T is an autologous cell therapy for the treatment of moderate to severe nasolabial fold wrinkles in adults.

Foresight Biotherapeutics - Has recently completed a Phase 3 trial of FST-201 (dexamethasone 0.1%) Otic Suspension vs. the FDA-approved drug Ciprodex (ciprofloxacin 0.3%, dexamethasone 0.1%) Otic Suspension (Alcon Laboratories, Inc.) in the treatment of acute otitis externa (Swimmer’s ear). (Link)

Hyperion Therapeutics - Developing GT4P, an ammonium remover, for urea cyclic disorders and hepatic encephalopathy - Positive Phase 3 data and a high likelihood of approval in 2011/12 timeframe. Would consider a partnership or sale transaction. (Link)

$Ibsa - Tirosint (L-Thyroxin) in soft gel capsules for treatment of hypothyroidism. Approved in the U.S. but not yet marketed. Company searching for a marketing partner. Ibsa - looking to outlicense betametasone valerate patch for treatment of psoriasis. A wide range of markets (EU, USA, South America, Middle and Far East) are still available on exclusive or semi-exclusive basis. Possibilities for a global agreement. (Link)

**UPDATE** $Intelgenx - CPI-300 is a novel, high strength of Bupropion HCl, the active ingredient in Wellbutrin XL(R). Indicated for depression. This product was approved in November 2011 and Intelgenx is in active licensing discussions to find a commercial partner.

Intermune - Bloomberg reports on April 27: “InterMune known for its drug to treat lung scarring, hired Goldman Sachs (GS.N) to help it weigh a possible sale... Goldman has been conducting an auction of InterMune for more than a month and some potential bidders have been spooked by the biotechnology company’s expectations for a sale price, Bloomberg news reported.” Company commercializing Pirfenidone in Europe. Company market cap over $2bn.

Keryx - In Phase 3 with Zerenex, a ferric citrate for treatment of hyperphosphatemia in ESRD. Expects to file an NDA assuming positive data by mid-2012.
Mannkind - Looking to partner Afresa, an inhalable insulin, that has an upcoming PDUFA date. Rumored to be in an active M&A mode. Company received an approvable letter on Mar 15, 2010. The FDA asked for more information on data designed to support the clinical utility of Afrezza, as well as information about how comparable the commercial version of the product is to the version used in clinical trials.

MAP Pharma - Would look at partnership for its late stage inhaled migraine drug, Levadex. In Jan 2010, announced that the U.S. Food and Drug Administration (FDA) has informed the Company that a second pivotal efficacy study is not required for this drug. (Link)

NEW Mayne Pharma - Lozanoc™ (SUBA®-itraconazole) is an improved patent protected formulation of itraconazole to treat fungal infections. The bioavailability of SUBA®-itraconazole is twice that of the originator product (Sporanox®) and shows reduced intra- and inter-subject variation. A Marketing Authorisation Application (MAA) in the EU has been submitted (November 2010) and discussions with the FDA are underway regarding further requirements for 505(b)2 filing and US registration. Interested parties should contact andrew.dunbar@maynepharma.com.

Moberg Derma - K301 for seborrheic dermatitis has shown benefit in two Phase 3 clinical trials.

Molecular Insight Pharmaceuticals - Azedra in Phase 2 for the treatment of metastatic neuroendocrine tumors such as pheochromocytoma, carcinoid and neuroblastoma that are not amenable to treatment with surgery or conventional chemotherapy. Very positive recent data that highlight potential for rapid approval. SPA in place with FDA. Company has emerged well capitalized from a bankruptcy process with a new board of directors.

$ Neurogesx - Qutenza is a patch that delivers synthetic capsaicin for PHN on the market in U.S.. Recently approved. Partnered in the EU to Astellas in June 2009. Company looking for partnerships in Asia and Latin America. (Link)

UPDATE NPS Pharma - developing GATTEX for the treatment of short bowel syndrome. Well advanced in clinical development. Recently saw some deaths of subjects on study. NPS has indicated interest in commercializing this product on its own.

UPDATE NuPath - Recently went public with Zelrix, a promising late stage candidate for migraine (iontophoretic sumatriptan patch). NDA filing in Oct 2010 with PDUFA date of August 29, 2011. FDA issued a complete response letter requesting additional CMC and early stage clinical work. Company is open to strategic discussions.

UPDATE Optimer - Promising Phase 3 data for Prulifloxacin in infectious diarrhea. Favorable comparison versus ViroPharma’s vancomycin. Open to a partnership transaction for this drug following the recent approval of Dificid (fidaxomicin) by the FDA.

OPKO Health - Will report Phase 3 data later this year for Bevasiranib, a siRNA drug designed to silence VEGF for treatment of AMD.

OxiGene - ZYBRESTAT is currently being evaluated in a pivotal registration study in anaplastic thyroid cancer (ATC) under a Special Protocol Assessment agreement with the U.S. Food and Drug Administration (FDA). In active partnership dialogue. Update: Oxigene merger with Vaxgen was declined by Vaxgen Shareholders on Feb 3, 2010.

UPDATE $ Pacira Pharmaceuticals - Looking to partner Exprarel, a long acting bipuvicaine, outside of the U.S. This product was approved by the FDA on Oct 31, 2011. Interested parties should contact Darren Pincus at DarrenP@pacira.com.

Piedmont Pharmaceuticals - Have a late stage product for treatment of head lice. Partnered and marketed in Europe. RESULTZ is sold internationally through licensing partners. Looking for other partners.

**UPDATE** Protein Sciences - Has FluBlok for treatment of influenza. Pending BLA. Agreement of licensing signed by TM and UMN for Asian rights. Update: thinking of an IPO following approval by FDA of FluBlok in 2012. ([Link](#))

**UPDATE** Raptor Pharmaceutical - likely to be able to file for NDA of DR Cysteamine, which is delayed-release, enteric-coated microbead formulation of cysteamine bitartrate for the treatment of cystinosis. In June 2011, Raptor reported positive data from a pivotal, Phase 3 clinical trial, examining the safety and tolerability of every 12-hour DR Cysteamine compared to immediate-release cysteamine bitartrate (the current standard of care) in nephropathic cystinosis patients. Company intends to self-commercialize this product. ([Link](#))

**NEW** Rempex - planning to file an NDA in 2012 for an undisclosed antibiotic. ([Link](#))

SciClone - ZADAXIN in Phase 3 for the treatment of hepatitis C.

Savient Pharmaceuticals - FDA approved KRYSTEXXA (pegloticase) in Sep 2010, a PEGylated uric acid specific enzyme indicated for the treatment of chronic gout in adult patients refractory to conventional therapy. Company is seeking a commercial buyer and is using JP Morgan and Lazard in its search for an acquisition partner. Update: Savient is now pursuing a launch of Krystexxa on its own and is building a 50-person plus sales force. ([Link](#))

Stallergenes - Stalair® line of allergy products including ones aimed at rhinitis, asthma and mites. Late stage opportunity for a large market. Both specialty and potential primary care call points. Company recently indicated that it intends to pursue U.S. commercialization on its own. Currently looking for a China partner. ([Link](#))

**UPDATE** Syndax - Entinostat (SNDX-275), an oral class I- selective HDAC inhibitor with a long half life, for cancers. In registration for breast cancer 2nd line treatment. Company would be most likely to consider either a global partnership deal, an IPO or a change of control transaction. ([Link](#))

Thrombogenics - completed Phase 3 studies for Microplasmin in Phase 3 clinical development for the non-surgical treatment of back of the eye diseases. Good evidence of efficacy with two positive Phase 3 trials reported. Would consider a sale. ([Link](#))

**UPDATE** Titan Pharmaceuticals - Probuphine is a novel, subcutaneous implant formulation of buprenorphine designed to deliver six months of medication following a single treatment. This product has demonstrated strong positive results in a controlled Phase 3 study for the treatment of opioid addiction and an NDA filing is in preparation. ([Link](#))

Topaz Pharma - completed two Phase 3 studies for the treatment of head lice with Ivermectin. Planning to submit NDA to FDA soon. ([Link](#))

Toyama - T-705, a viral RNA polymerase inhibitor, is in Phase 3 studies in Japan and Phase 2 in the United States as a highly promising anti-viral drug for the treatment of influenza. ([Link](#))

Undisclosed - neurology oriented marketer looking for a primary care marketer to co-promote a rapidly growing and recently approved product for migraine attacks.

**UPDATE** Vivus - Would be interested in partnering avanafil, a PDE V inhibitor in development for erectile dysfunction. Recently reported out second Phase 3 program also with strong data. Vivus submitted an NDA for this drug on June 30, 2011 and has a PDUFA date in the U.S. of April 29, 2012. Cowen predicts this drug will take 8% market share with $800mm in U.S. revenue. ([Link](#))

**UPDATE** Vivus - Looking to partner Qnexa in Europe and other ROW territories. An approval is possible in the EMA with long-term market exclusivity in mid-2012 (or sooner).
Winston Pharmaceuticals - Rheumaderm cream for the treatment of OA. NDA pending. Marketed in Canada by Sanofi. Based on civamide which acts on type-C neurons by specific binding to a membrane receptor, the TRPV-1 receptor. Looking for licensing partners in other parts of the world. ([Link]

Winston Pharmaceuticals - Also pursuing Civamide, a TRPV-1 modulator, for the treatment of episodic cluster headaches. Late stage with approval pending in Canada. ([Link]

Zogenix - Sumavel, a needlefree transdermal delivery of sumatriptan for migraine. Recent FDA approval with product launch using Astellas as a co-promotion partner. Company could consider an M&A transaction. Note: Raised $30mm from Cowen Healthcare Royalty Partners in July 2011.

Zurex - Zuragen is for prevention of catheter-related bloodstream infections. Hospital application available.

**MATURE BRANDED PRODUCTS**

- **Medicure** - May sell U.S. rights to Aggrastat, originally a Merck drug, for acute cardiac indications. Update: company restructured its liabilities on July 18, 2011 in order to reduce debt. Beal Advisors will be working with the company to find a partner or buyer for Aggrastat going forward. ([Link]

- **Microbix** - Owns Urokinase, formerly of Abbott (Abbokinase). Did revenues of $10mm+ recently. Not formally for sale but purchased for a low price due to manufacturing issues which have largely been fixed. Signed a marketing agreement with Kinlytic. ([Link]

- **Undisclosed** - marketed bronchodilator with revenues > $20mm. Company open to a product sale. Note: Graceway Pharma was sold to Medicis in Nov 2011, incluading its Maxair auto-inhaler.

- **Undisclosed** - process for sale of company with a marketed but not promoted cardiovascular product with 2011 revenues around $9 million.

- **Undisclosed** - large pharma disposing of a marketed antibiotic with global rights. This product is off patent.

- **Undisclosed** - large pharma disposing of a marketed oncology drug with revenues of around $5mm. Significant barriers to entry.

- **Undisclosed** - sale of company with over $10mm in revenue with largely genericized specialty products in CNS and renal disease.

- **Undisclosed** - two marketed antibiotics in U.S.. One is facing generic competition. Revenues total around $10mm.

- **Undisclosed** - selling a group of marketed hormone products with the assistance of Torreya Partners. Interested parties should contact Tom Bird ([tom.bird@torreyapartners.com](mailto:tom.bird@torreyapartners.com))

- **Undisclosed** - selling off $20mm revenue+ commercial product for narrow market with pediatric applications.

- **Undisclosed** - mature oncology product for treatment of breast cancer with revenues of approximately $8mm. Product is highly profitable as it is not promoted.

- **Undisclosed** - Pharma disposing of large mature product. Off patent with revenues over $80mm.

- **Undisclosed** - pharma company is open to divesting a marketed specialty cardiology product with revenues > $30mm per annum.
NEW $ Undisclosed player - selling off portfolio of $50mm area specialty pharma products included. Process well advanced via Torreya Partners. Interested parties should contacted Benj Garrett (benj.garrett@torreyapartners.com).

COMPLETED $ Undisclosed party - looking to sell a portfolio of marketed prenatal vitamins with assistance from Torreya Partners. Interested parties should contact Tom Bird (tom.bird@torreyapartners.com).

NEONATOLOGY


Discovery Labs - is reportedly engaged in partnership discussions with respect to licensing its neonatal franchise, which includes Surfaxin, Sufaxin LS and Aerosurf. Want a partner to collaborate on clinical development for Surfaxin LS and Aerosurf, and to play a central role in commercialization for all three products. Surfaxin is a synthetic KL4 Surfactant for treatment of neonatal RDS. Company expects to refile for approval in Q1 2011. Has granted development and marketing rights for Discovery Labs’ SRT products to Esteve in the key southern Europe markets of Spain, Italy, Portugal, Greece, and Andorra.

UPDATE Infacare - Developing Stannsoporfin (Stanate) for Neonatal Hyperbilirubinemia, which is in a Phase 2b trial. Company expects to report out data soon. (Link)

NEW Premacure - Lack of IGF-1 in premature babies can lead to severe complications. A Phase I clinical trial for of IGF-1/IGFBP-3 (Premplex®) found that levels of IGF-I were increased to within physiological levels and that administration to preterm infants is safe and well tolerated. A Phase II, safety and efficacy multi-center clinical trial has started in Sweden and is currently recruiting patients.

Symphogen - Rozrolimupab (Sym001) is a recombinant polyclonal composition of 25 different Rhesus D specific antibodies for the treatment of primary Immune Thrombocytopenia and for Anti-RhD prophylaxis (ADP) in prevention of Hemolytic Disease of the Newborn. The ongoing phase 2 clinical trial evaluates the safety and efficacy, and explores the dose range of Sym001 in immune thrombocytopenia patients. This product was returned to Symphogen from Biovitrum Swedish Orphan for strategic reasons on Dec 30, 2010. (Link)

NEW Undisclosed - company developing special type of milk for the treatment of babies born prematurely. On the market.

NEW Ventria - has developed a recombinant lactoferrin for the prophylaxis and treatment of infection in prematurely born children. Positive POC dataset for this product.

NUTRITIONALS AND NATURAL PRODUCTS


$ Bellus Health - Would consider partnering US rights to Vivimind for Alzheimers. Active partnering discussions ongoing in Europe. In April, 2011 announced that it has signed an exclusive license and distribution agreement with Agahan Ayandeye Pars Inc. for this product in the MidEast.

$ Enzymatic Therapy - A natural product distributor sells 250+ natural products. Considering a sale. (Link)

KV Pharma - Licensing rights to prenatal vitams, PrimaCare, and hematinics, Repliva, via Robert W. Baird. (Link)
**NEW** Rottapharm - for sale according to the Wall Street Journal. Company has two Phase 3 drugs in development and a strong group of branded products in the market. Revenues over $850 million. Sale price could be over $2.5 billion.

**COMPLETED** Undisclosed party - looking to sell a portfolio of marketed prenatal vitamins with assistance from Torreya Partners. Interested parties should contact Tom Bird (tom.bird@torreyapartners.com).

**NEW** Wockhardt - rumored to be in a process to sell its substantial nutrition business as part of a process to pay down external debt.

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**OBESITY**

7TM - TM38837 is a CB1 which has been shown to be inactive in the CNS. This suggests a promising approach given the history with endocannabinoids. It will be important next to show that such a compound is efficacious. ([Link](#))

BHV Pharma - BHV091009 is a highly selective sodium glucose co-transporter 2 inhibitor ("SGLT2") being developed for the treatment of diabetes and obesity. Two supportive Phase 2b studies. Also pursuing an obesity indication. ([Link](#))

Fasgen - Obesity and metabolic disease modification programs have progressed and company is looking for a partnership. Strong IP and set of compounds in the fatty acid synthase area including GPAT and CPT-1 inhibitors. Preclinical program entering the lead generation phase. ([Link](#))

Lithera - Announced positive results from a Phase IIb clinical study of LIPO-102, its novel injectable combination of salmeterol xinafoate (SX) and fluticasone propionate (FP) for selective, non-ablative fat reduction. In a Phase 2b study LIPO-102 was well-tolerated when administered weekly for 8 weeks into the subcutaneous abdominal fat of healthy subjects and produced dose- and time-related reductions in mean abdominal volume and circumference.

Neurosearch - Looking to partner obesity program (Tesofensine) going into Phase 3. July, 2011 signed agreement with Biolin Scientific over sale of company’s 30.1% shareholding in Sophion BioScience and all other owners will sell in Sophion will see ownership share.

University of Strathclyde - Galegine derivatives as anti-obesity compounds. Similar to metformin and likely work through AMP kinase activation. ([Link](#)).

**UPDATE** Vivus - Looking to partner Qnexa in Europe and other ROW territories. An approval is possible in the EMA with long-term market exclusivity in mid-2012 (or sooner).

Yonsei University - Peptides which reduce obesity. Preclinical. ([Link](#))

Zafgen - in Phase 1 studies of a novel treatment for obesity in bariatric patients. This drug potentially circumvents many of the problems that have arisen with recent late stage candidates in obesity, including pursuing a sicker patient population with a product that can’t be widely used. July, 2011 signed a $33 million series C financing with Atlas Venture and Third Rock Ventures. ([Link](#))

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**ONCOLOGY - LIQUID TUMORS**

4SC - developing resminostat for Hodgkin’s Lymphoma. Phase 2a data showed a few partial responders and some cases of stable disease. ([Link](#))

Acetylon Pharma - Taking ACY-1215 a next-generation Class II-selective histone deacetylase (HDAC) inhibitor - into Phase I/II clinical testing for patients with relapsed and relapsed-refractory multiple myeloma. No POC data yet. ([Link](#))
Affimed - Taking AFM13, with a novel tetravalent bispecific antibody structure, for the treatment of Hodgkin’s disease (HD) into Phase I. No approved treatments on market. Partnership discussions underway.  

**UPDATE** Allos Therapeutics - Oncology marketer with Folotyn® for liquid tumors. After a recently failed merger attempt with AMAG, Allos is rumored to be continuing to explore strategic alternatives with the assistance of JP Morgan. ([Link](#))

Antisoma - Partnering AS1413, formerly Xanafide, is a DNA intercalator in phase 3 development in secondary AML outside the U.S. Expect to report out data in Q1 2011. Would consider an M&A deal.  

Ariad - AP24534, multtargeted kinase inhibitor in Phase 1 for hematological cancer. Appears to address a form of CML caused by a mutant T315I which is resistant to currently available drugs. M&A not likely.  

**UPDATE** Avila - In mid-Phase 1 for a BTK inhibitor that is highly selective and orally dosed. Btk plays a critical role in the development and activation of B cells, and its inhibition will be of therapeutic significance in the treatment of both of B cell-related hematological cancers (e.g. non-Hodgkin lymphoma (NHL) and B cell chronic lymphocytic leukemia (B-CLL)), and autoimmune diseases (e.g. rheumatoid arthritis). High interest in this company, confirmed by the recent partnering deal between J&J and Pharmacyclics. Reported some Phase 1 data at ASH on Dec 13, 2011. Among the CLL patients in the highest dose arm completed in Phase 1 studies (4 of the 6 subjects), there changes in circulating lymphocyte levels were noted that are consistent with the clinical response seen by the Pharmacyclics product. ([Link](#))

Benitec Limited - starting a small Phase I/II study using Benitec’s DNA-directed RNA interference (ddRNAi) technology in lymphoma patients carrying the HIV virus.

Biocryst - Phase 2 open label study with Forodesine for CLL showed 6 of 23 PRs. In May 2011 presented positive data from its two completed, randomized, double-blind, placebo-controlled Phase 2 studies of BCX4208 in patients with gout at the Annual European Congress of Rheumatology. Partnered with Mundipharma for Europe, Asia, Australia and certain neighboring countries.

Biogen Idec - Looking to outlicense Galiximab, a anti-CD80 antibody, which has shown activity in B-cell lymphomas. Has gone through Phase 3 trials. Biogen looking to outlicense after a recent strategic review. ([Link](#))

BioInvent - In Phase 2 studies in multiple myeloma with an anti-CD54 antibody. Encouraging Phase 1 data.  

Celator Pharmaceuticals - Strong Phase 2 data for CPX-351 for AML shown at ASH in Dec 2010. In June 2011 announced positive results in elderly patients diagnosed with secondary acute myeloid leukemia treated with CPX-351. Observations included high-risk patients with secondary AML showed greater improvements with CPX-351. ([Link](#))

Celleron Therapeutics - Developing CXD101, an HDAC inhibitor from AZ with a novel biomarker strategy. ([Link](#))

Chroma Therapeutics - Tesedostat has completed a Phase 2a study in AML. 10 of 38 patients with a poor prognosis achieved either a partial or a complete response to the drug. August, 2010 announced that the Company had advanced its novel macrophage-targeted HDAC inhibitor, CHR-S154, into preclinical development and received undisclosed milestone payment from partner GlaxoSmithKline. ([Link](#))

Clavis Pharma - Elycetarabine 9/61 CRs in a Phase 2 trial in late stage AML. Large clinical trials undertaken. Recently outlicensed second program for pancreatic cancer to Clovis Oncology. In June, 2011 announces that Clovis Oncology, Inc, its development partner for CP-4126, has expanded the ongoing observational study to determine the patient stratification parameters in the pivotal LEAP clinical trial with CP-4126. ([Link](#))
Cytrx - Looking to partner Bafetinif, a dual Bcr-Abl and Lyn-kinase inhibitor for CML where a mutation exists which creates resistance to imatinib and dasatinib. Has completed a Phase 1b study. A Phase 2 study in relapsed CLL is underway.

Deciphera - developing switch inhibitors which control kinase shape. DCC-2036 in Phase 1 for CML. (Link)

Epicept - Ceplene approved for AML in Europe. Active partnership process underway. Jan 11: EpiCept announces commercial licensing agreement for Ceplene(R) with Meda in Europe and Pacific Rim. Receives $3mm upfront and royalties and milestones. U.S. rights available but company received a refusal to file on Aug 23, 2010 from FDA. In June, 2011 Ceplene received written response from FDA for application of Special Protocol Assessment of Ceplene. FDA invited company to request meeting to discuss response to application. (Link)

Erytech - Graspa is an innovative formulation of asparaginase. Graspa demonstrated positive results in Phase 2 trials in acute lymphoblastic leukaemia (ALL) and excellent safety profile compared to control treatment. Graspa is currently in Phase II/III clinical trial in relapsed and ALL patients in Europe.

II-Yang Pharmaceuticals - looking to partner radotinib, a novel treatment for leukemia based on bcr-ABL modulation. In Phase 3 studies in Korea. (Link)

Intellikine - Very promising dual Pi3k / m-tor compounds, entering Phase 1 clinical trials. Company in active partnership process across all compounds. A partnership is in place with Infinity Pharma. Intellikine remains an exciting player in its space and is open to a change of control transaction.

Italfarmaco - Givinostat is a Phase 2 HDAC inhibitor for inflammatory diseases and cancer. Has been in Phase 2 for juvenile arthritis, myeloproliferative diseases, Hodgkin’s disease and multiple myeloma.

KAEL-GemVax - Phase 3 results anticipated for GV1001 in pancreatic cancer in May 2012. GV1001 is a therapeutic peptide cancer vaccine targeting telomerase. The vaccine has been tested in clinical trials for pancreatic cancer, lung cancer, liver cancer, melanoma and chronic lymphomytic leukemia (CLL).

Lorus - looking to partner antisense approach to AML. Promising Phase 1b data.

Nereus Pharmaceuticals - Developing marizomib (NPI-0052), is a second-generation inhibitor of the 20S proteasome. Patient data coming up and a potential strategic transaction under consideration. Company also has a Phase 2 vascular disrupting agent with positive interim data in NSCLC. In June 2010 this company received additional funding from its investors. (Link)

OncoNova - Estybon inhibits the PI-3 Kinase, ERK (growth) and AKT (pro-survival) pathways. Entering a Phase 2 study for the control of MDS. July 2011, announced license agreement with SymBio Pharmaceuticals to collaborate and commercialize Rigosertib in Japan and Korea. Conducting late-stage clinical trials in the US, Europe and India for treatment of MDS and solid tumors. (Link)

Onyx - rumored to be exploring strategic alternatives. Substantial value potential tied to a recently filed NDA for carfilzomib, a protease inhibitor, for the treatment of liquid tumors including multiple myeloma. Bloomberg reported on Nov 30, 2011 that Onyx is working with Centerview as a financial advisor. On Dec 12, FDA indicated that an accelerated review would not take place.

S*Bio - going into Phase 2 with novel HDAC inhibitor. In Dec 2010 reported positive safety and tolerability results from Phase 1.

S*Bio - In June, 2011 announced results from multiple Phase I/II clinical studies of JAK2 inhibitor SB1518 which confirmed safety and efficacy. S*Bio has received the rights back to this program from Onyx Pharma. S*Bio is open to a change of control transaction.
Stemline Therapeutics - A cancer stem cell targeting agent, SL-401, saw Phase 2 data at ASH which demonstrated efficacy, including two durable complete remissions (CRs), multiple blast reductions and disease stabilizations in relapsed/refractory AML, poor risk elderly AML, and high risk MDS. (Link)

Sunesis - Vosaroxin in Phase 2 for AML. Data reported in Nov 2010 indicated meaningful response rates and prolonged survival times. Entering a Phase 3 study known as VALOR. Compound intercalates DNA and inhibits topoisomerase II, resulting in replication-dependent, site-selective DNA damage. Company would consider partnership and, potentially, a sale. (Link)

Syndax - Entinostat (SNDX-275), an oral class I- selective HDAC inhibitor with a long half life, for cancers. In registration for breast cancer 2nd line treatment. Company would be most likely to consider either a global partnership deal, an IPO or a change of control transaction. (Link)

Telik - In June, 2011 announced the initiation of Phase 2 clinical trial to evaluate oral Telintra in patients with Revlimid refractory or resistant, deletion 5q MDS. Trial will enroll up to 117 patients and employ a sequential design with two interim analyses.

Topotarget - Would out license HDAC product, Belinostat, in larger indications. Recently picked up from Curagen. Company considered a takeover target. Positive Phase 1 data reported at ASH 2010. Recently finished recruitment for Phase I trial of oral belinostat in patients with refractory or relapsed Hodgkin’s or non-Hodgkin’s lymphoma as second part of development program.

NEW $ Undisclosed - large pharma disposing of a marketed oncology drug with revenues of around $30mm. Significant barriers to entry.

NEW Undisclosed - Large Pharma disposing of a promising drug for the treatment of NHL.

Xencor - Developing an anti-CD30 (XmAB 2513) antibody for Hodgkin’s disease and T-cell lymphoma. Has finished Phase 1. (Link)

YM Biosciences - CYT387 in Phase 2 study in myelofibrosis. Recently successful completion of Phase 1 and Phase 2a studies. YM argues that this has the potential to be the best in class JAK inhibitor. (Link)

NEW Ziopharm Oncology - Darinaparsin in Phase 2 for PTCL. Favorable results to date.

ONCOLOGY - SOLID TUMORS


AB Science - In Phase 3 studies of Masitinib against imatinib (Gleevec®) in GIST. A recent Phase 2 trial saw prolonged PFS and OS. (Link)

Access Pharmaceuticals - Searching for a partner for a platinum prodrug, ProLindac, similar to Eloxatin. Currently in a Phase 2 study in ovarian cancer. Company is also interested in partnering an anti-proliferative antibody called Angiolix which targets Lactadherin. (Link)

Active Biotech - Successful Phase 2 study showed tasquinimod’s ability to impede disease progression in symptom-free patients with metastatic, castrate-resistant, prostate cancer. Drug works by attacking blood vessels. April, 2011 entered partnership to co-develop TASQ with Ipsen. Phase 3 trial was recently initiated and patient recruitment is ongoing. Rights are available in North America, South America and Japan. (Link)

Adaptimmune - Has opened a Phase I/II, two cohort, open label clinical trial in metastatic melanoma to investigate the safety, bioactivity and anti-tumor effect of patients’ own T cells that have been genetically modified to express
a high affinity T cell receptor (TCR) specific for a type of tumor antigen (protein) known as a cancer testis antigen (CT antigen).

Adherex - Eniluracil enhances 5-FU effect. Open to partnership. Phase 1 data positive. Enrolling patients in a Phase 2 trial for breast cancer. Was at GSK before. (Link)

Advantagene - Phase 2 positive in prostate cancer for AdV-tk (ProstAtak). Going into Phase 3 trial with SPA.

Advenchen Laboratories - YN-968D1 contains apatinib, a novel small molecule angiogenesis inhibitor that shows selective protein tyrosine kinase (PTK) inhibition on VEGFr2 and Ret and mild inhibition on c-Kit and c-SRC. In Phase 2 studies in China.

Agennix - Open to partnering Talactoferrin which is a recombinant form of human lactoferrin - for the indication of non-small cell lung cancer. It is currently in clinical phase 3 trials (75% enrolled) and has shown good efficacy in Phase 2 in NSCLC and renal cell carcinoma. Company formed from a recent merger with GPC Biotech AG. (Link)

Alchemia - Starting a Phase 3 program of its HA-irinotecan with the intention of partnering after data are in. Plans to seek a 505b(2) approval in the United States.

Ambx - very exciting platform technologies which allow engineering of proteins developed in both eukaryotic and prokaryotic cells including an antibody drug conjugate program for oncology. (Link)

AmpliMed - Phase 2 trial of Amplimexon in 142 patients with advanced metastatic pancreatic cancer will report out soon. Will partner before starting Phase 3 trial.

Anaphore - pioneering Altimers®, a new class of protein therapeutics that has a trivalent structure. Better ability to lock on to a target. Working on a number of targets including a TRAIL-R antibody for oncology that is pre-clinical. (Link)

Agenus - Prophage, a personalized cancer vaccine tested in 800+ patients - 8 cancers - in over 15 clinical trials spanning Phase 1, 2, and 3 - market approval in Russia. Update: Results recently announced from Phase 2 clinical trials testing Prophage Series G-200 vaccine in recurrent brain cancer, primary objective to assess survival rate for 26 weeks. Results showed 93% of patients were alive after 26 weeks and had a median overall survival of 11 months.

Angstrom Pharmaceuticals - completed a placebo-controlled Phase 2 study evaluating Â6 in recurrent ovarian cancer. The time to tumor progression was doubled in patients receiving Â6 over that of placebo (p<0.01). Â6 is a urokinase derived octapeptide, an inhibitor of angiogenesis and inducer of tumor apoptosis. (Link)

Antisense Pharma - Trabedersen is an antisense oligonucleotide that suppresses the neoformation of transforming growth factor beta 2 (TGF-b2) at molecular level. Positive Phase 2b results in refractory anaplastic astrocytoma. Recent pharma round. (Link)

Apeiron Biologics - In Phase 3 for CH14.18, an antibody, for neuroblastoma. (Link)

Apogenix - in Phase 2 with APG101, a CD95 antibody, for GBM. (Link)

Aragon Pharma - In phase 1b /2 trial for ARN-509 for castration-resistant prostate cancer. (Link)

Ark Therapeutics - Cerepro for brain cancer. Was turned down for approval at EMEA in Mar 2010. Company reported: "Following the withdrawal of the Cerepro® MAA, Ark has initiated a full review of its substantial portfolio of assets, their potential and alternative strategies and options to optimise shareholder value. The review will also consider strategic alternatives in light of approaches that have already been received.”
AROG Pharmaceuticals - Crenolanib (CP-868,596), a potent FLT3 and PDGFR inhibitor that is active against mutant PDGFR. Phase 2 trials are on-going for glioma and D842V mutant GIST in the US.

Arqule - ARQ 621 inhibits Eg5 and reduces tumors in multiple animal models. In early Phase 1 with a promising BRAF inhibitor. (Link)

Array BioPharma - ARRY-543, a KSP inhibitor reported Phase 1 data at ASH. Array reported 2 partial responses in 30 heavily pretreated multiple myeloma patients. Company looking to partner this product. (Link)

Arno Therapeutics - Reported in June 2011 that its Phase 2 clinical study of AR-67 (third generation camptothesic analogue) has met pre-defined interim goals for patients with glioblastoma multiforme (GBM) who were not previously treated with Avastin and will continue toward completion.

Ascenta Therapeutics - AT-101 is a pan-Bcl-2 inhibitor (including Bcl-2, Bcl-xL, Bcl-w, and Mcl-1), that has been shown to directly induce apoptosis by operating as a BH3 mimetic and indirectly as an upregulator of Noxa and Puma. For adjunct therapy with taxanes in HRPC, currently in Phase 2. Programs in XIAP, HDM2.

Astex - AT13387 completed a phase 1 study designed to assess the safety and tolerability of AT13387 in patients with advanced refractory tumors. Based upon the results of this initial phase 1 study, Astex Pharmaceuticals™ has initiated a phase 2 study in patients with refractory gastrointestinal stromal tumors (GIST). Open to a partnership deal.

ATLAB Pharma SAS - developing an antibody drug conjugate (ADC) targeting PSMA for the treatment of prostate cancer. In Phase 2 studies. A similar program is at Progenics.

Bavarian Nordic - Looking to partner Prostvac, a prostate cancer vaccine which has completed Phase 2 trials. In extensive partnership discussions and a deal is targeted in 2011. Compared to Dendreon’s Provenge.

Bellicum Pharma - autologous dendritic cell vaccine for prostate cancer. Positive early data.

Biogen Idec - looking to outlicense BIIB021, an HSP90 modulator, targeted for GIST. (Link) (Link2). Also outlicensing BIIB028, an HSP90 modulator that is in Phase 1 studies.

Biogen Idec - looking to outlicense Volociximab, a chimeric monoclonal antibody that inhibits the functional activity of a5ß1 integrin, a protein found on activated endothelial cells. Blocking the activity of a5ß1 integrin has been found to prevent angiogenesis. This product is jointly owned with Abbott’s Facet Biotechnology. (Link)

Biogen Idec - looking to outlicense BIIB015 which consists of Biogen Idec’s Cripto-binding antibody and Immunogen’s DM4 cell-killing agent. BIIB015 advanced into Phase I testing in the summer of 2008. This comopound was slated for Phase 2 in 2011 until Biogen Idec decided to exit oncology after a recent strategic review.

Biogen Idec - looking to outlicsense an anti IGF1-R antibody for solid tumors. Has progressed into Phase 2 studies. (Link)

Bionomics - BNC105, looking to partner CNS drug candidates and a vascular disrupting agent which is going into Phase 2 trials in renal cancer. Company has retained Greenhill Caliburn as a 27% shareholder is searching for a buyer for its stake. The buyer will be required to tender for all of the company’s shares. Update: June 2011 - company chose to raise institutional equity and has sold down the stake of Greenhill Caliburn. (Link)

Biotecnol - CAB051, an anti-HER2 antibody which is nearing readiness for clinical testing.
Biothera - Imprime PGG is a novel immunotherapy that works synergistically with anti-tumor monoclonal antibodies to activate a large population of the body’s immune cells (neutrophils) to kill cancer cells. Positive Phase 2 results in combination with Erbitux in colorectal cancer.

Biovest International - Has several assets including BiovaxID which has recently had positive Phase 3 data in NHL. Company recently emerged from bankruptcy.

BTG - OncoGel®, a sustained-release formulation of paclitaxel, a well established chemotherapy agent, for local injection. A Phase IIb study in 124 patients with operable oesophageal cancer is ongoing. Preliminary tumour response and histopathology data are expected to be available towards the end of 2010 or in early 2011, with survival data towards the end of 2011. (Link)

Cancer Prevention Pharmaceuticals - CPP’s lead product has been associated with reduced formation of colon polyps, the sole cause of colon cancer in a first Phase 3 study. A Phase 3 trial is planned for familial adenomatous polyposis (FAP), an inherited disease with potential annual sales of up to $500 Million. This company has been assisted by Geller Biopharm. (Link)

CDG Therapeutics - Developing p28, a peptide (fragment of azurin) in Phase 1 studies.

Celator Pharmaceuticals - In Phase 2 trials for CPX-1 for colorectal cancer.

Celldex - Their lead antibody-drug conjugate (ADC), CDX-011, is in Phase 2 development for the treatment of locally advanced or metastatic breast cancer (in Phase 2b) and stage 3 or IV melanoma. Saw 15% ORR in melanoma Phase 2a study. CDX-011 targets glycoprotein NMB, also known as osteoactivin, an cell surface protein overexpressed in certain cancers. (Link)

Celek Pharmaceuticals - CEL-031, is a Phase 2 drug in development for the treatment of non-muscle invasive bladder cancer. Works by inducing tumor cell apoptosis and inhibiting cell proliferation. (Link)

Celsion - ThermoDox® is a proprietary heat-activated liposomal encapsulation of doxorubicin, an approved and frequently used oncology drug for the treatment of a wide range of cancers. In the HEAT Study, ThermoDox® is administered intravenously in combination with RFA. In November 2011 the data monitoring committee for the HEAT study completed a planned interim analysis for safety, efficacy and futility and unanimously recommended that the study continue to its final analysis as planned. Final data are expected in December 2011. (Link)

Cerulean Pharma - CRLX101 with camptothecin is in a Phase 2b trial. CRLX301 with docetaxel has finished preclinical work. Both formulations have much lower side effects than on market versions. Looking for partnerships.

Cornerstone Pharma - Developing CPI-613 for pancreatic cancer. Currently in a Phase 1b trial. Interim data show safety and some hints of efficacy. (Link)

CureVac - upregulates mRNA to create specific autoantigen responses to disease. Has recently shown a nice proof of principle in man for a therapeutic vaccine aimed at prostate cancer in a Phase 1b study. In June 2011 reported results from final Phase Ib/II clinical trial using RNActive vaccine CV9103 to treat patients with advanced castration-resistant prostate cancer. Final trial results confirm preliminary data previously published demonstrating safety and immunogenicity of the vaccine.

Curis - CUDC-101 is the first-in-class compound under development to jointly inhibit HDAC, EGFR and Her2. A recent Phase 1 study demonstrated safety and hints of efficacy. Expects to initiate Phase 1 clinical trial of CUDC-101 in advanced HPV-head and neck cancer patient in mid-2011. Partnered with Genentech in development of Vismodegib, indicated for treatment of advanced basal cell carcinoma. Studies show positive data from clinical trials. (Link)
Cyclacel - Seliciclib, is a first-in-class, orally available, cyclin dependent kinase (CDK) inhibitor. The compound selectively inhibits multiple enzyme targets - CDK2/E, CDK2/A, CDK7 and CDK9 - involved the process of cell division. Promising Phase 2 data. In June, 2011 announced interim data results from ongoing, multi-center, Phase I/II clinical trial examining safety and effectiveness of oral sapacitabine administered sequentially with decitabine.

Cylene Pharmaceuticals - Phase 2 data pending in neuroendocrine tumors on Quarfloxin, a fluoroquinolone that disrupts G-quadruplex (QPLX) DNA structure underlying tumor growth. In June, 2011 announced positive data from ongoing Phase I trials of CX-4945. Results highlighted safety, pharmacokinetic and exposure-related pharmacodynamic responses observed.

Cytrx - In July, 2011 announced that its tumor-targeted doxorubicin conjugate, INNO-206, is delivering doxorubicin safely at doses over 4 times higher than the standard doxorubicin dose in the Company's open-label Phase 1b safety and dose escalation clinical trial.

Deciphera - developing switch inhibitors which control kinase shape. DCC-2157, Inhibitor of BCR-ABL and T315I BCR-ABL gatekeeper mutant, resistant to all marketed kinase inhibitors. Also has c-MET inhibitors. (Link)

NEW - Diffusion Pharma - animal studies demonstrate a tripling of survival and superior tumor control when trans sodium crocetinate (TSC) is combined with radiation and chemotherapy in animal models of cancer. Based on this work, the Company is initiating a Phase 2 clinical trial of TSC in primary brain cancer (GBM) patients. This trial will examine the survival of newly diagnosed GBM patients when TSC is combined with the current standard-of-care (radiation plus chemotherapy) with enrollment beginning in late 2011. Data expected in early 2013. (Link)

Egen - EGEN-001 in development for advanced recurrent ovarian cancer, as well as other local or disseminated solid tumors. The product is based on TheraPlas(R) delivery technology. It is composed of an interleukin-12 (IL-12) gene expression plasmid and a biocompatible delivery polymer. (Link)

NEW - Endoceutics - developing Acolbifene, an estrogen blocker, now in Phase 3 for the treatment of estrogen dependent breast cancer. (Link)

Endocyte - EC145 targets an alkaloid chemotherapy drug to folate receptors over-expressed on cancer cells. Met primary endpoint in Phase 2 study demonstrating 85% improvement in median progression-free survival for treatment of platinum resistant ovarian cancer. (Link)

EOS - In Phase 1 with a selective FGF / VEGF kinase inhibitor. This is a promising combination for addressing revascularization issues that have been seen with VEGF inhibitors. (Link)

UPDATE - Exelixis - According to Bloomberg on April 12, 2011: “Exelixis Inc. is working with Goldman Sachs Group Inc. to prepare for potential takeover offers after its experimental drug helped prostate-cancer patients in a study.” Company’s XL-184 has reported dramatic data on reducing metastatic prostate lesions at ASCO. Update: company has hired a Chief Commercialization Officer with intention to introduce cabozantinib to the U.S. market and has reported strong data for cabozantinib in the treatment of medullary thyroid cancer.

Five Prime Therapeutics - in Phase I with FP-1039, a soluble fusion protein consisting of a portion of FGFR1 that is designed to neutralize the activity of multiple FGFs and FGFRs. Many solid tumors depend on FGF. (Link)

Ganymed Pharmaceuticals - Good Phase 1 data with Claudiximab, an iMAB directed against the GC182 target, a gastric differentiation protein that is expressed at the cell surface of 70% of gastric cancers, 50% of pancreatic cancers, 30% of esophageal cancers, and 25% of NSCLC. Now in Phase 2a studies in gastro-esophageal cancer. (Link)

Genesis Pharma - developing a CD-55 antibody against solid tumors. In Preclinical testing. (Link)

Genyous Biomed - Aneustat for solid tumors - targets multiple ligands including VEGF, EGF and IL-1b. (Link)
GlobeImmune - GI-4000, a series of Tarmogen® products engineered to express the seven most common KRAS mutations, was given to patients with stage I-III lung adenocarcinoma having a matching KRAS mutation in their tumor. Showed good tolerability and disease-specific immune responses in this phase 1 trial. (Link)

Harbor Biosciences - Has hired Burrill to help partner Apoptone (HE3235) in Phase I/II trials to treat hormone-refractory prostate cancer. Preclinical studies show Apoptone decreased tumor size by inducing programmed cell death, also shrank established tumors and prevented appearance of new tumor in rodent breast cancer models. Company previously called Hollis-Eden.

Hybrigenics - In Phase 2 studies of Inecalcitol, a vitamin D analogue that is more potential than calcitrol. Positive data from a single arm study in prostate cancer. In May, 2011 announced complete positive results of clinical tolerance in Phase IIa study of daily oral inecalcitol in castrate-resistant prostate cancer patients in combination with 3-weekly Taxotere chemotherapy regime. Company now moving to a Phase 2b study.

Idera Pharmaceuticals - On Nov 30, 2011 announced that it has regained global rights to IMO-2055, an agonist of Toll-like Receptor (TLR) 9, as part of an agreed-upon termination of its oncology collaboration with Merck KGaA. During the collaboration, Merck KGaA conducted Phase 1 trials of IMO-2055 in several cancer indications and has an ongoing randomized Phase 2 trial of IMO-2055 in combination with Erbitux(R) in patients with squamous cell cancer of the head and neck (SCCHN).

Immunocellular Therapeutics - ImmunoCellular is in a Phase 2 trial in GBM for ICT-107, an autologous, dendritic cell-based vaccine that activates a patient's immune system against specific tumor-associated antigens. Open to strategic dialogue when data from this trial are available.

Immunogen - Seen as one of the more exciting oncology players in the market. Has an unpartnered antibody drug conjugate that binds to CD56 Lorvotuzumab Mertansine for SCLC, multiple myeloma, MCC, Ovarian Cancer and other CD56+ Solid Tumors. A recent study showed a number of partial responses in the treatment of multiple myeloma. (Link)

Immunomedics - In partnership discussions on the oncology indications for two monoclonal antibodies which are currently in Phase 2 trials (Link)

InNexus - Next generation cancer antibodies at pre-clinical stage. Several highly potent anti-CD20 antibodies in development. Has engaged Dundee Securities to act as financial advisor. (Link)

Institute of Cancer Research (UK) - looking to outlicense checkpoint-1 inhibitors (Chk1). Preclinical. (Link)

KAEL-GemVax - Phase 3 results anticipated for GV1001 in pancreatic cancer in May 2012. GV1001 is a therapeutic peptide cancer vaccine targeting telomerase. The vaccine has been tested in clinical trials for pancreatic cancer, lung cancer, liver cancer, melanoma and chronic lymphomytic leukemia (CLL).

Keryx - open to partnering KRX-0401, (Perifosine), a novel, first-in-class, oral anticancer agent that inhibits AKT membrane recruitment and pathway activation. Update: Has started two Phase 3 trials with a focus on achieving registration by 2012/13. Note: The MidEast rights to Perifosine were licensed by Hikma on Nov 23, 2011.

Medigene - EndoTAG1 a proprietary cationic liposomal complex encasing paclitaxel which selectively targets angiogenic endothelial cells. Upcoming data and partnership discussions. Update: CFO recently indicated that a deal was expected by mid-year 2010.

Molecular Insight Pharmaceuticals - Azedra in Phase 2 for the treatment of metastatic neuroendocrine tumors such as pheochromocytoma, carcinoid and neuroblastoma that are not amenable to treatment with surgery or conventional chemotherapy. Very positive recent data that highlight potential for rapid approval. SPA in place with FDA. Company has emerged well capitalized from a bankruptcy process and new board of directors.
MolMed - **Novel VTA** for vascularised solid tumours. Phase 2 trials as single agent ongoing in colorectal and liver cancer, and in mesothelioma. Company has reported evidence of activity in a number of tumor types. Looking for a development partner. June, 2011 reports new clinical data of investigational anticancer drug NGR-hTNF in lung cancer confirming favorable safety profile. [Link]

Myrexis - positive responses in Avastin® failures in glioblastoma multiforme with Azixa, a novel microtubule destabilizing agent. In non-clinical studies, Azixa has demonstrated the ability to effectively cross the blood-brain barrier and accumulate in the brain at levels as much as 30 times that measured in the plasma. [Link]

Nektar - pursuing a pegylated irinotecan (NKTR-102) with superior PK profile. Has shown very positive data in breast and ovarian cancer. [Link]

Oncolytics Biotech - Developing Reolysin® for treatment of head and neck cancer. Promising survival results from a recent Phase 2 study with an active control. Now in a randomized phase 2 trial of Reolysin + paclitaxel versus paclitaxel alone in ovarian cancer. Clinical data showed positive results in patients with non-small cell lung cancer. [Link]

OncoNova - Estybon inhibits the PI-3 Kinase, ERK (growth) and AKT (pro-survival) pathways. Entering a Phase 2 study for the control of MDS. July 2011, announced license agreement with SymBio Pharmaceuticals to collaborate and commercialize Rigosertib in Japan and Korea. Conducting late-stage clinical trials in the US, Europe and India for treatment of MDS and solid tumors. [Link]

OxiGene - ZYBRESTAT, a vascular disrupting agent, is currently being evaluated in a pivotal registration study in anaplastic thyroid cancer (ATC) under a Special Protocol Assessment agreement with the U.S. Food and Drug Administration (FDA). Positive final results reported June, 2011 in Phase 2/3 studies of ZYBRESTAT, with median overall survival time at 5.2 months. Have also seen some improvement in patient response in NSCLC. In active partnership dialogue. [Link]

Pathway Therapeutics - in Phase 3 for an optimized PI3K alpha / mTOR compound. High selective with strong preclinical profile. [Link]

Patrys - developing antibodies for solid tumors. In Phase 1 with PAT-SM6 that binds to GRP78 that is found on the surface of cancer cells but not on the surface of healthy tissues. Also in Phase 1 with PAT-SC1 that binds to CD-55. (also see Genesis Pharma). [Link]

Peregrine Pharma - Positive data in a single arm Phase 2a trial evaluating Bavituximab in combination with carboplatin and paclitaxel in advanced breast cancer patients. Is currently in two phase 2b trials in NSCLC. Reported 12.4 month overall survival data from Phase 2 trial in non-small cell lung cancer in June, 2011. Would discuss partnership of this antibody outside of the U.S. - particularly after Phase 2 NSCLC data arrive in Q1 2012. [Link]

PharmaMar - Promising Phase 2 data on Aplidine in a trial of patients with advanced medullary thyroid carcinoma. Open to partnering compound. Just ended a Phase 2 trial with compound PM001183 with an endpoint of overall survival at 6 months in patients with metastatic pancreatic cancer. Clinical trial results will be performed in several centers and aims to test PM 001183’s antitumor activity as second line treatment. [Link]

Philogen - L19-IL2 is well tolerated in patients and is being clinically developed in two registrational clinical trials in patients with metastatic melanoma. In addition, L19-IL2 is being studied in combination with gemcitabine in patients with pancreatic cancer.

Pierre Fabre - Outlicensing North American rights to Javelor (vinflunine) - a newly approved bi-fluorinated MTI (Microtubule inhibitor) for bladder cancer. Licensing process is making substantial progress. [Link]
Portola - Early stage SYK inhibitor program (PRT062607) for cancer and immunology. Initiated a Phase I ascending dose trial in March, 2011 of PRT062607, an oral Syk-specific kinase inhibitor to treat chronic inflammatory diseases and certain cancers, including non-Hodgkin’s lymphoma and chronic lymphocytic leukemia. Drawing high interest after Rigel data.

S*BIO - Looking to partner mTOR/PI3K compounds which are in pre-clinical development. (Link)

Sareum - looking to outlicense Aurora + FLT3 Kinase program. Preclinical. (Link)

Samyang Pharma - Genexol-PM is undergoing clinical phase 3 trials in Korea for its use as a chemotherapeutic agent for the treatment of refractory cancer. Also in U.S. Phase 2 trials. This is a version of Paclitaxel that does not include Cremophor EL. (Link)


Spectrum Pharmaceuticals - Looking for ROW partner for Elsamitrucin. This Phase 1 drug induces single strand breaks in DNA and inhibits topoisomerase I and II, enzymes that play an important role in DNA replication. (Link)

Stemline Therapeutics - In June, 2011 announced that clinical results from a multi-epitope brain cancer vaccine, that Stemline has licensed from the University of Pittsburgh (Pitt) and is further developing as SL-701. Showed positive Phase I/II trial results.

Telik - Partnership talks for its compound Telcyta, for the treatment of advanced cancers. Mixed trial results in selected solid tumor indications.

Telormedix - Developing a promising TLR9 modulator that is in a Phase 1 / 2 trial for the treatment of bladder cancer. (Link)

Tetralogic - TetraLogic's lead Smac mimetic drug, TL32711, is entering Phase 2 clinical trials and is being developed for both solid tumors and hematological malignancies as a single agent and in combination with several standard-of-care cancer therapies. In Phase 1 clinical studies as a single agent and in combination with standard-of-care chemotherapies, TL32711 has demonstrated strong correlation between drug exposure, target coverage and apoptosis induction in tumors at well-tolerated doses as well as promising anti-tumor activity in patients. (Link)

To-bbb - Glutathione pegylated liposomal doxorubicin (2B3-101) is in development for multiple brain cancer indications with an initial focus on patients with brain metastases of breast cancer. to-BBB started the first phase I/II clinical trial with 2B3-101 in June 2011. (Link)

Tokai Pharmaceuticals - TOK-001 is a specific androgen receptor modulator/lyase inhibitor (SARM/LI) going into Phase 1b/2a trials for prostate cancer. (Link)

Tracon Pharma - TRC105 is a human chimeric monoclonal antibody that binds CD105 (or endoglin), a target that is essential for angiogenesis. A Phase 1 trial of TRC105 for patients with advanced cancer is nearly complete and a Phase 1/2 trial of TRC105 for patients with prostate cancer is ongoing. (Link)

Tracon Pharma - TRC102 is a small molecule inhibitor of base-excision repair intended to reverse resistance to alkylator and antimetabolite chemotherapy. A Phase 1 study of TRC102 in combination with Alimta® chemotherapy was completed and Phase 2 studies are planned in lung cancer and other indications. (Link)

Tragara Pharma - In Phase 2 of Capoxigem®, a Cox-2 inhibitor, for prostate cancer. Expects data in Q2 2011. (Link)

Tyrogenex - More potent PDGFR inhibitor than Nexavar and less cytotoxic in cells. More selective than Sutent, particularly against AMPK and RETD. (Link)
NEW $ Undisclosed - division of larger pharmaceutical company with approximately $30mm revenues in oncology product sales. Active sale process underway.

NEW $ Undisclosed - mature oncology product for treatment of breast cancer with revenues of approximately $8mm. Product is highly profitable as it is not promoted.

VentiRx - VTX-2337 is a small molecule Toll-like receptor 8 (TLR8) agonist that stimulates myeloid dendritic cells, monocytes, and enhances NK cell responses. It is administered subcutaneously on a weekly basis, and successfully completed a Phase I study in oncology. (Link)

Viventia - Vicinium® has VB4-84, a humanized, single-chain antibody fragment specific for the EpCAM antigen. The antibody fragment is recombinantly fused to a truncated form of Pseudomonas exotoxin A, ETA(252-608), engineered to lack the cell binding domain, but to retain the active domains necessary to induce cell death. Has done well in Phase 2a studies in bladder cancer. (Link)

Xcovery - Partnering a rich set of pre-clinical PI3K kinase inhibitors and also candidates for inhibition of ALK and c-MET. High interest.

Y's Therapeutics - Anti-CD26 Humanized Monoclonal Antibody for solid tumors. Phase 1 ready.

YM Biosciences - Is developing an EGFR antibody targeting HER1, Nimotuzumab, for solid tumors. Late stage and on the market in developing countries. Believes that this drug could be introduced to the U.S. market in the next few years, depending on Cuba policy.

ONCOLOGY - SUPPORTIVE CARE

7TM - TM30339 is a Phase I/II NPY Y4 selective agonist to be used within gastrointestinal disorders including cancer supportive care (mucositis), malabsorption, Ulcerative Colitis, Crohn's disease and short bowel syndrome.

$ Access Pharmaceuticals - undertaking a commercial launch of Mugard which was approved in 2010. This product is used for treating oral mucositis. Access is actively looking for a co-promotional partner for this product. June, 2011 received acceptance letter from Chinese SFDA citing all documentation for MuGard, indicated for treatment of oral mucositis a side effect of anti-cancer treatments, has been submitted and accepted. (Link)

ActoGeniX - completed Phase 1b study of topically applied AG013 in 21 subjects receiving induction chemotherapy for the treatment of cancers of the head and neck. AG013 was proven safe and well tolerated. Analysis of initial efficacy showed a 35% reduction of the percentage of days with ulcerative oral mucositis in the AG013-treated patients versus the placebo-treated patients. Looking for a partner. (Link)

Archimedes Pharma - Is seeking licensees for North America and Japan for PecFent, a nasally-delivered fentanyl product for breakthrough cancer pain, currently in Phase 3 development. Archimedes Pharma is seeking licensees outside of Europe for PecFent®. Has gained a positive opinion from the CHMP, and has been filed for regulatory approval in the US. Preparing for a U.S. launch.

AGI Therapeutics - Positive results in a Phase 2 proof of concept study of AGI-004 in the control of chemotherapy-induced diarrhea (CID). AGI004 contains a proprietary form of a known ganglion-blocking drug mecamylamine, which is specifically formulated in a low dose controlled release form to optimize its gastrointestinal effects. (Link)

AP Pharma - Would outlicense APF530 in Phase 3 for CINV. Positive Phase 3 data. The FDA has accepted for review the NDA and, based on the Prescription Drug User Fee Act (PDUFA), has issued an action date of March 18, 2010. Update: AP received a complete response letter that required additional studies on bioavailability and metabolism. Meetings with FDA to discuss issues raised in complete response letter, and anticipates resubmission of the APF530 NDA during the first half of 2012. (Link)
Calabar - Would out-license physostigmine, a phase 2 product for dry mouth (Xerostomia).

Camurus - Episil® (CAM2028) is a protective, bioadhesive intra-oral liquid for treatment of oral mucositis. The product is registered in Europe as a Medical Device, Class I, with an expected market launch in Q2 2010. Note: This product was licensed to IS Pharma in Europe after its recent approval. A 510k registration submission in the US is under way.

Epicept - NP-1 cream for neuropathic pain (4% amitriptyline and 2% ketamine) in Phase 2 development. Company report: “A Phase 2 trial in chemotherapy-induced peripheral neuropathy (CPN) is being conducted by the National Cancer Institute (NCI)-funded Community Clinical Oncology Program. The double-blind, randomized placebo-controlled study includes approximately 400 patients suffering from painful CPN for at least 28 days following the conclusion of chemotherapy. The primary endpoint of the 6-week trial is change in average daily pain intensity scores from baseline to the endpoint. This trial is currently enrolling patients.” (Link)

The GI Company - The GI Company recently achieved POC in a Phase 2 clinical study that evaluated ITF as a treatment for oral mucositis which are lesions that can form in the mouth as a result of chemotherapy and radiation therapy. Currently for sale via Burrill & Company. (Link)

Mogam - has developed a GCSF with an alternative pegylation structure. In Phase 2/3 studies in Korea. Available for global licensing. (Link)

Lipocine - LPCN 1035, Phase 2 development of benzonatate for opioid resistant cough in advanced cancer patients (Link)

Merrion Pharmaceuticals - Orazol is a once weekly tablet form of zoledronic acid, which is only available as an intravenous infusion (Zometa® and other trademarks, Novartis). Zoledronic acid is a very potent and thoroughly investigated bisphosphonate compound, which has been used to treat over 3 million patients worldwide for bone metastases. Update: Novartis reported in Dec 2010 that Zometa did not meet endpoint for use in breast cancer, an indication that has been targeted by Merrion.

Midway Pharmaceuticals - MDY-1001, a proprietary functional derivative of high molecular weight PEG 15-20 (non-absorbed). Planning Phase 1 studies for the prevention of enteritis associated with radiation used in cancer treatment. (Link)

Ohr Pharmaceuticals - In Phase 2b studies with an broad spectrum anti-inflammatory agent for treating cancer cachexia. (Link)

NEW PsiOxus - MT-102 for cancer cachexia. This drug is an anabolic catabolic transforming agent. Ongoing Phase 2 study underway with completion targeted for 2012. (Link)

Salient Pharma - developing CASAD for chemotherapy induced diarrhea (CTID). Phase 2 studies underway. Tolerability of CASAD was reported positive for second in-study interim analyses.

Sherrington Pharma - Resiniferatoxin for intractable cancer pain. In Phase 2 studies. (Link)

Tarix Pharmaceuticals - Conducting Phase I/II clinical trials of TXA-127 following engraftment. Phase I trials focusing on the safety of TXA-127 following double cord blood stem cell transplant, while Phase 2 trials are evaluating patients undergoing autologous peripheral blood stem cell transplant. Both studies are evaluating safety. (Link)

Tranzyme - TZP-201 is a potent motilin antagonist for chemotherapy-induced diarrhea, diarrhea associated with infection, and diarrhea associated with irritable bowel syndrome. Tranzyme expects to file an IND for TZP-201 in the next several months.
Undisclosed - Marketed supportive care oncology product portfolio available.

Xenome - Xen2174 is a peptide that binds to norepinephrine transporter (NET), blocking its ability to remove NE from the synapse. Positive Phase 2 data in severe cancer pain.

**OPHTHALMOLOGY**

Aerie Pharmaceutical - Has hired Seaview Securities to explore strategic options. The company’s lead candidate, AR-12286, is a Rho-kinase inhibitor, which is in Phase 3 trials. Company chose to raise capital rather than sell itself. ([Link](#))

**UPDATE** Alimera Sciences - Positive data from Phase 3 trials of Fluocinolone Acetonide in Diabetic Macular Edema (Iluvien). Update: Company has gone public and CEO recently indicated to Pharmawire that had received offers prior to IPO but decided they were too low. Company received a complete response letter that requires further analysis of Phase 3 data and questions about relative risk / benefit of Iluvien. Resubmitted NDA for Iluvien in May, 2011 addressing the questions in the complete response letter. Update: In November 2011 FDA indicated that at least two additional studies would be required for approval.

Altheos - developing a Rho-kinase inhibitor for glaucoma (like Aerie Pharma). Has recently raised funds to go forward with clinical studies. ([Link](#))

**NEW** Clermont Pharma - Looking for a partner for a non-preserved formulation of latanoprost for glaucoma. NDA filing is pending and FDA decision expected in second half of 2012. The non-preserved latanoprost demonstrated the primary efficacy endpoint of non-inferiority to Xalatan and was better tolerated than Xalatan (less stinging).

Comentis - ATG-3 is an antagonist of the nACh receptor pathway in the vasculature. A 330 patient Phase 2 dose-ranging study in patients with neovascular or wet AMD is underway.

Cutanea - Strong data for Ionic Contra Viral Therapy product CLS003. Actively shopping the company.

Danube Pharmaceuticals - DNB-001 has achieved POC for a Phase 2a small molecule for reducing IOP associated with glaucoma.

EyeGatePharma - Just started Phase 3 trials of EGP-437 for treatment of dry eye. The Phase 2 study showed significant improvements in the signs and symptoms of dry eye. Also see Aciont. January, 2011 secured $5.9 million series D venture funding which will be used to further development of EGP-437 indicated for treatment of Dry Eye Syndrome. First company to complete Phase 2 studies using iontophoresis technology to deliver active compound to the eye under IND application. Hermo Pharma - In Phase 2a for HER-801 for ambylophia (lazy eye). ([Link](#))

High Point Pharmaceuticals - HPP851, sterile eye drops for the treatment of primary open angle glaucoma (POAG). Preclinical Inhibitor of 11βHSD1. ([Link](#))

Insite Vision - ISV-502 (AzaSite Plus) is a topical combination antibiotic/corticosteroid product for blepharitis and blepharconjunctivitis and currently is Phase 3 studies. Has just entered Phase 2 studies for ISV-303 for the treatment of pain and inflammation in cataract surgery. ([Link](#))


Kowa - K-115 is a small molecule, NCE that selectively inhibits Rho kinase. Kowa is developing K-115 in Japan as an ophthalmic solution for the treatment of glaucoma. In Phase 1 and looking for a US / EU partner.
Lithera - Announced positive results from a Phase IIb clinical study of LIPO-102, its novel injectable combination of salmeterol xinafoate (SX) and fluticasone propionate (FP) for selective, non-ablative fat reduction. In a Phase 2b study LIPO-102 was well-tolerated when administered weekly for 8 weeks into the subcutaneous abdominal fat of healthy subjects and produced dose- and time-related reductions in mean abdominal volume and circumference.

Macusight - Sirolimus for AMD. Solid Phase 1 data. Partnered in Asia to Santen. (Link)

**NEW** Mimetogen - promising Phase 2 data for the treatment of dry eye with MIM-D3, a small molecule nerve growth factor peptidomimetic that can stimulate goblet cell differentiation.

Neurotech - **NT-501** is being developed for geographic atrophy, a serious sight-threatening condition associated with dry age-related macular degeneration (AMD) and retinitis pigmentosa. Recent Phase 2 data (April, 2011) results showed that NT-501 slowed progression of vision loss in patients with geographic atrophy associated with wet AMD and also demonstrated significant cone photoreceptor preservation in patients with retinitis pigmentosa.

**COMPLETED** Novagali - has recently begun a Phase 2 trial of Catioprost in glaucoma. Catioprost® combines latanoprost with Novagali Pharma’s patented Novasorb® technology which reduces damage to the ocular surface. Update: Company bought by Santen for $136 million on Sep 28, 2011. (Link)

Optherion - Has a promising treatment for wet AMD. Recombinant ‘protective’ human CFH protein which is in preclinical development. Company has retained an investment bank. (Link)

Promedior - Developing recombinant human Serum Amyloid P Component for the prevention and treatment of fibrotic pathology. PRM-151 in Phase 2a trials for prevention of post-surgical scarring in glaucoma patients. Preclinical data report a demonstration of PRM-151 in the reduction of neovascularization in independent models of AMD and diabetic retinopathy. Would consider a corporate sale and is currently in active partnership talks after raising an additional $12 million.

RegenRx - RGN-259 is a sterile, preservative-free topical eye drop formulation of Tβ4 for ophthalmic indications. Based on recent human clinical data, the company is starting a physician-sponsored Phase 2 trial in dry eye associated with graft versus host disease (GvHD). (Link)

SARcode - developing a novel class of lymphocyte function-associated antigen-1 (LFA-1) antagonists. Company reported positive results of a 230 patient Phase 2 proof-of-concept study evaluating topical SAR 1118 ophthalmic solution in the treatment of aqueous deficient dry eye (keratoconjunctivitis sicca) in May 2010. Reports from Phase 2 clinical trials show positive results in subjects receiving SAR1118 for the treatment of dry eye, including reduction in corneal staining, increased tear production and improved visual-related function (May, 2011). Currently preparing for further clinical trials. (Link)

Sylentis - focused on topical RNAi therapy with a Phase 1 trial of a therapy for glaucoma and dry eye.

**NEW** Taejoon Pharma - looking to outlicensing Toravin eye drops (tobramycin). On the market in Japan.

Taligen - Developing a Factor H (TT30) replacement, part of the complement system, for orphan diseases. The company will start phase I clinical studies for TT30 shortly. Will likely focus on AMD. Looking for a strategic partner. Bought by Alexion in January 2011 for $111 million.

**UPDATE** Thrombogenics - completed Phase 3 studies for Microplasmin in Phase 3 clinical development for the non-surgical treatment of back of the eye diseases. Good evidence of efficacy with two positive Phase 3 trials reported. Expected to be on market by end of 2012. Would consider a sale. (Link)

**ORGAN TRANSPLANT**
ADIENNE Pharma - Begedina is a new murine monoclonal antibody directed against CD26 antigens, expressed on a small portion of CD4 T lymphocytes produced by haematopoietic progenitor cells. Begedina is being developed for the treatment of Graft Versus Host Disease. Promising Phase 2 data reported.

Angion Biomedica - in Phase 2 studies for BB3, an HGF mimetic for the treatment of hepatic fibrosis and to facilitate better outcomes in renal transplantation. The naturally-occurring cytokine hepatocyte growth factor (HGF), also known as scatter factor, is active in numerous tissues throughout the body, participating in the regulation of angiogenesis, organogenesis, tissue repair and neural induction. (Link)

Genzyme - Looking to outlicense Genz-29155, a novel, small molecule, orally bioavailable, 1x daily novel inhibitor of TNF-α signaling. Proof of concept has been demonstrated in multiple models of transplantation rejection, multiple sclerosis (MS), sepsis, inflammatory bowel disease (IBD) and lupus. (Link)

Isotechnika - Voclosporin, an oral Calcineurin inhibitor, for transplant and psoriasis has achieved good POC. Recently did a China deal. Plans to start Phase 3 trials in Q3 2012 with a primary endpoint of superiority to tacrolimus in the prevention of biopsy proven acute rejection. (Link)

Limerick BioPharma - developing an adjunct treatment for tacrolimus which is now in Phase 1 clinical testing. The drug restores metabolic control and has been in 120 subjects to date. (Link)

Kiadis - ATIR is a personalized cell based therapy of donor T-lymphocytes depleted of alloreactive T-cells and is infused after a patient receives a mismatched bone marrow transplantation to reduce Transplant Related Mortality. Has shown effectiveness in a recent Phase 2a study.

Novimmune - In Phase 2 with an anti-CD3 antibody for Crohn’s disease. Exploring potential as an immunomodulator in Type 1 diabetes and transplant rejection as well.

Stromedix - STX-100 is being developed for the treatment of chronic allograft dysfunction in kidney transplant recipients. Also exploring IPF indication. Humanized monoclonal antibody to integrin αvβ6, has finished Phase 1 studies. Planning to enter Phase 2 studies.

SuppreMol - Developing soluble Fcy-Receptors (sFcyRs) for autoimmune disease. These are recombinant autologous proteins with strong immunosuppressive potential. SM101, SuppreMol’s main product is a recombinant, soluble, non-glycosylated version of the human Fcy receptor FyRIIb which has completed a Phase 1 trial for ITP. In Phase 2 studies in ITP and going into further studies for lupus. (Link)

Veloxis - Positive top-line results from a Phase 2 clinical trial involving 63 patients comparing LCP-Tacro™ tablets administered once daily versus Prograf® (tacrolimus) capsules (Astellas Pharma) administered twice daily in de novo kidney transplant patients. Other transplant products available.

Viron Therapeutics - Developing VT-111, a serine protease inhibitor. Reduces restenosis and increases plaque stability in animal models. Has recently finished a Phase 2a study in PCI patients. (Link). Viron has been granted U.S patents for organ transplant and arthritis drug candidates.

Y's Therapeutics - YSPSL is fused P-selectin glycoprotein ligand (PSGL) and human IgG1. It acts as an antagonist of P-selectin. This is currently in Phase 2 studies for prevention of delayed graft function and prevention of IRI in transplant patients.

ORPHAN PRODUCTS

Abiogen - Neridronate is an amino-bisphosphonate used in Metabolic Osteopathy and has gone into Phase 3 trials. Also being studies for patients with thalassemias. (Link)
Adventrx - ANX-188 is a novel, purified, rheologic and antithrombotic compound initially being developed as a first-in-class treatment for pediatric patients with sickle cell disease in acute crisis. Ready for Phase 3 studies and open to partnering deals.

Alvine - Enzymatic treatment for celiac disease. Currently in a Phase 2a clinical trial. Interested parties should contact Jim Watson at jwatson@alvinepharma.com. (Link)

AmpliPhi - Formerly Targeted Genetics. Preparing for a Phase 3 trial of Biophage-PA for the treatment of otitis media. Also effective in cystic fibrosis. BioPhage-PA is a mixture of six bacteriophages that destroy Pseudomonas aeruginosa. Bacteriophage or phages are naturally occurring viruses that consist of an outer protein hull enclosing genetic material. (Link)

Amsterdam Molecular Therapeutics (AMT) - Glybera for lipoprotein deficiency. This disease is serious, often resulting in death and quite rare (one in a million). This drug could generate annual revenues of more than $300 million. AMT has not yet filed this product with the FDA. Has filed an EMA registration for Glybera to treat lipoprotein lipase deficiency. Update: Recently failed to get an EMA approval for this product and will need to run additional trials. (Link)

Amsterdam Molecular Therapeutics (AMT) - Hemophilia B - very promising results from a gene therapy trial to treat Hemophilia B which is due to a deficiency of Factor IX. Update: In Nov 2011 the company indicated that it will be focusing resources on the development of this product. (Link)

AOP Orphan Pharma - P-1101 contains pegylated interferon alfa-2b (PEG-P- INF alpha-2b), a conjugation of recombinant interferon alfa-2b with monomethoxy polyethylene glycol which shows antiviral and immunomodulatory effects. P-1101 is being developed for the treatment of polycythemia vera. A Phase 1b study is underway.

Arriva Pharmaceuticals - Inhaled protein rAAT (Respriva) replacement therapy for hereditary emphysema, completed two early Phase 2 trials and recently completed manufacturing with a more highly purified and higher yield recombinant alpha 1-antitrypsin for upcoming clinical trials. Company is looking at a partnership deal.


AVI Biopharma - DMD Exon 50 has obtained positive Phase 1 data for Duchenne Muscular Dystrophy. Company is looking to accelerate clinical development with the recent appointment of a new CEO. (Link)

Biomarin - In discussions with potential partners to advance its Pompe disease drug candidate, BMN-103.

Bluebird Bio - Positive Phase 1b type data for LentiGlobin® for gene therapy treatment in a young adult with severe betathalassemia, a blood disorder that is one of the most frequent inherited diseases. Also has positive data for a treatment for Adrenoleukodystrophy (ALD) is a rare, inherited neurological disorder.

Cancer Prevention Pharmaceuticals - seeking a ROW partner for its combo of eflornithine and sulindac. In Phase 3 studies for familial adenomatous polyposis (FAP).

Clinuvel - In Phase 3 for European approval for Afamelanotide, a photoprotectant to be used in Erythropoietic Protoporphyria. Update: Company looking to partner in EU first and then the U.S. In active discussions but thinking of going alone. In May, 2011 EMA acknowledges completion of all filing requirements for Afamelanotide and the company will file during the last quarter of 2011.

Corcept Therapeutics - As an orphan designation for Corlux, in development for Cushing’s Syndrome - a condition of hypercortisolism with approx. 20K persons in US. Positive Phase 3 data released in December 2010.

Cytokinetics - According to a recent press release, Cytokinetics, Inc. announced opening of next phase 2 clinical trial of CK-2017357, a fast skeletal muscle activator, in patients with amyotrophic lateral sclerosis. CK-2017357 selectively activates the fast skeletal troponin complex by increasing its sensitivity to calcium, leading to an increase in skeletal muscle force. Saw activity in a recent Phase 2a trial Actively seeking partnerships. (Link)

**UPDATE** $ Daval International - Aimspro, orphan Status Designations have been awarded by the Therapeutic Goods Administration (TGA) for the treatment of Krabbe Leukodystrophy and Amyotrophic Lateral Sclerosis. In June, 2011 completed a Phase 2 trial study of AIMS PRO for treatment of bladder dysfunction in patients with secondary Progressive MS. Sold on a named patient basis. In Oct 2011, announced positive results from a Phase 2 in patients with Late Stage Established Diffuse Cutaneous Systemic Sclerosis (diffuse scleroderma).

**COMPLETED** $ DuoCort - Plenadren contains hydrocortisone, a glucocorticoid receptor agonist. It delivers a more physiological dose of the active substance, better mimicking the body's own glucocorticoid serum profile combining rapid release and extended release characteristics. Plenadren is being developed as a dual-release once a day tablet, for the treatment Addison's disease (adrenal insufficiency). Sold on a named patient basis by Clinigen. Update: Company bought by Viropharma in November 2011. (Link)

Dyax - Marketing Kalbitor® (DX-88), for hereditary angioedema. Recently approved. Company going alone at present but could enter either into a partnership or an M&A deal. In May 2011 expanded distribution agreement with Sigma-Tau to include Europe, North Africa, Latin America, Southeast Asia, the Middle East, Russia, Australia and New Zealand. (Link)

Edimer Pharma - Developing EDI200, a protein engineered to replace naturally occurring ectodysplasin A that is deficient in patients with XLHED.

**UPDATE** Edison Pharma - EPI743 acts by targeting an enzyme NADPH quinone oxidoreductase1 (NQO1) and synchronize energy generation in mitochondria with the need to counter cellular redox stress. EPI743 is in Phase 2 trials for the treatment of inherited mitochondrial respiratory chain diseases. Update: Company completed a financing in Q3 2011.

Enobia - Developing ENB-0040, a human recombinant tissue non-specific alkaline phosphatase, for the treatment of hyperphosphatasia - a debilitating bone condition. Positive data in man. Rumored to be exploring strategic alternatives via JP Morgan. Update: Company has continued to report positive data and may be looking at a rapid approval with FDA. As a result, has not proceeded with potential M&A deal in light of value inflection ahead.

EryDel - Phase 2 treatment for cystic fibrosis that is based upon the EryDex system. (Link)

Green Cross - In Phase I/II randomized, single-blind, active-controlled study to evaluate the safety and efficacy of GC1111 (recombinant human iduronate-2-sulfatase) in hunter syndrome (mucopolysaccharidosis ii) patients. This program is drawing high interest. (Link)

Hyperion Therapeutics - Developing GT4P, an ammonium remover, for urea cyclic disorders and hepatic encephalopathy - Positive Phase 3 data and a high likelihood of approval in 2011/12 timeframe. Would consider a partnership or sale transaction. (Link)

Incode BioPharmaceutics - HC3-1496 results in enzymatic depletion of the complement protein C3, the key component for all three pathways of complement activation. Preclinical and applicable for oncology, PNH and RA. (Link)
Intermune - Filed an NDA for Pirfenidone for IPF in Q4. FDA failed to approve product. Additional trial underway with NDA resubmission planned in 2013. Company is currently commercializing this product in Europe.

Lithera - Announced positive results from a Phase IIb clinical study of LIPO-102, its novel injectable combination of salmeterol xinafoate (SX) and fluticasone propionate (FP) for selective, non-ablative fat reduction. In a Phase 2b study LIPO-102 was well-tolerated when administered weekly for 8 weeks into the subcutaneous abdominal fat of healthy subjects and produced dose- and time-related reductions in mean abdominal volume and circumference.

NeuroHealing Pharmaceuticals - dosing patients in a Phase II/III study to test the efficacy of NH001 (apomorphine) in accelerating the recovery and improving the outcome of patients in a vegetative state following a severe traumatic brain injury (TBI). (Link)

Numerate - Ransglutaminase 2 inhibitors for Celiac disease. (Link)

Ocean Therapeutics - Brevenal for the treatment of cystic fibrosis. Requires clinical studies. (Link)

Orphan Drugs NL BV - Developing levamisole for the treatment of steroid resistant nephrotic syndrome in children (a grouping of diseases including FSGS, membraneous nephropathy). Has enrolled 50 patients and this product is available in Europe on a named patient basis. Strong evidence of efficacy in past studies. Not licensed outside of EU. (Link)

UPDATE OxThera - Oxazyme is recombinanate oxalate degrading enzyme for the treatment of kidney stones. No data reported from a pending study in some time. A related compound is at Althea Technologies. (Link)

NEW Oxyrane - developing ERT for Pompe with technology that allows greatly improved uptake of drug. Raised $26mm in November 2011.

Prosensa - has partnered a highly innovative gene therapy program for Duchenne’s Muscular Dystrophy to GSK. Has a further unpartnered program for DMD available.

UPDATE Raptor Pharmaceutical - likely to be able to file for NDA of DR Cysteamine, which is delayed-release, enteric-coated microbead formulation of cysteamine bitartrate for the treatment of cystinosis. In June 2011, Raptor reported positive data from a pivotal, Phase 3 clinical trial, examining the safety and tolerability of every 12-hour DR Cysteamine compared to immediate-release cysteamine bitartrate (the current standard of care) in nephropathic cystinosis patients. Company intends to self-commercialize this product. (Link)

Serendex - inhaled rFVIIa for blast injury and lung bleeding. Six patient study showed high efficacy. Orphan designation granted. (Link)

UPDATE Sigma-Tau - Reuters (6/2/11): “Italy’s Sigma-Tau is eyeing the sale of up to 49 percent in the family-owned drugmaker to private equity, ahead of a possible IPO that could value it at more than $2 billion, people familiar with the situation said.” Company has approximately €1bn revenue with a strong rare disease business and a well established European brand business. It is believed that discussions regarding a stake sale are no longer active but rather the company is focused on restructuring its Italian business.

Soligenix - has partnered orBec/BDP with Sigma-Tau in the U.S. Looking to partner in ROW. Indication is GI manifestation of acute GVHD, thereby reducing the need for systemic immunosuppressive drugs to treat GI GVHD. Company is running a confirmatory trial and indicates a partnership is most likely after results are in. (Link)

Stemcells - HuCNS-SC is well-characterized, normal human CNS stem cells (HuCNS-SC) from brain tissue, isolated and purified using monoclonal antibodies against cell surface antigens. HuCNS-SC is being developed as intracerebral injection for the treatment of myelin disorders such as Pelizaeus-Merzbacher Disease. Phase 1 data upcoming in 2012. (Link)
**UPDATE** Synageva Pharma - SBC-102 is a recombinant protein and is being developed as a treatment for Lysosomal Acid Lipase (LAL) Deficiency. This drug candidate is an enzyme replacement therapy (ERT) that would replace the missing enzyme (lysosomal acid lipase) to reduce the build-up of cholesteryl esters and triglycerides throughout the body. Also see Amsterdam Molecular Therapeutics. Note: this company recently merged with Trimeris but may remain interested in partnership. ([Link](#))

Tivorsan - Biglycan induces the expression in the muscle cell membrane (sarcolemma) of utrophin that is typically replaced in adults by dystrophin. Thus, utrophin offers an alternative pathway to maintaining the integrity of the muscle cell membrane in persons with Duchenne’s Muscular Dystrophy. Tivorsan preparing to enter Phase 1 studies in 2011. ([Link](#))

**NEW** Trevi Therapeutics - Preparing to dose T111 in a Phase 2 trial for chronic uremic pruritis to determine proof of concept for safety and efficacy. ([Link](#))

**NEW** Undisclosed party - Positive Phase 2 data for a compound for the treatment of Fragile X syndrome. Company is seeking a buyer or global partnership with assistance of a financial advisor.

**NEW** Undisclosed party - sale of marketed neurology product with U.S. rights, growing revenues and orphan protection. Interested parties should contact Benj Garrett ([benj.garrett@torreyapartners.com](mailto:benj.garrett@torreyapartners.com)).

**UPDATE** Vanda - Tasimelteon, Melatonin agonist for sleep wake disorders, in phase III. Has orphan designation. This product is on track for a mid 2013 new Drug Application (NDA) filing.

Vivendy Therapeutics - Enzyme replacement therapy for N-acetylgalactosamine-6-sulfatase (GALNS) enzyme in MPS IVA by administering a modified recombinant human GALNS enzyme.

Zacharon Pharma - Developing molecule glycan inhibitors for the treatment of MPS and other lysosomal storage diseases. April, 2011 entered into R&D collaboration with Pfizer to develop small molecule drugs targeting carbohydrate polymers. ([Link](#))

Zymenex - Developing Lamazym, for the treatment of the lysosomal disease Alpha-Mannosidosis. This disease is due to a deficiency of the Laman enzyme, affects approximately 500 patients worldwide and the project is in late pre-clinical development. Update: Company headed into first trials in man in 2011.

### OTC PRODUCTS

$ Church & Dwight - Would sell some Del Pharma niche products.

Emisphere - has developed a rapid release Vitamin B12 which is on the market. Upcoming studies to show relative efficacy of this product which would likely be marketed as a medical food.

**UPDATE** GlaxoSmithKline - running a process to divest non-core OTC brands with assistance from Goldman Sachs. The products to be divested, which are primarily sold in Europe and the United States, had sales in 2010 of approximately £500 million, 10% of GSK’s total Consumer Healthcare turnover. They include analgesics: Solpadeine, BC and Goody’s; vitamin and supplement product Abtei; feminine hygiene treatment Lactacyd; and alli for weight management. ([Link](#))

**NEW** Guangxi Golden Throat (Guang Xi Jin Sang Zi), a privately held manufacturer of healthcare products, is reportedly in sale talks. The company has annual revenues of around $47mm from its throat lozenges, which sell under the 'Golden Throat' brandname.

Izun - Developing Periopatch for treating gingivitis and Synsore for apthous ulcers. Both destined for OTC market.

Marinomed Biotechnologie - The privately-held Austrian biopharmaceutical company is in talks with pharma players to outlicense its lead compound MAM-05.101, an antiviral nasal spray for the treatment of the common cold - particularly in children. This product is a GRAS botanical and has shown good efficacy in a Phase 2 type trial. Can likely be introduced to the market now as either an OTC product or medical food. On market in EU. Looking for licensing partner for U.S., Canada and Japan. In Austria the nasal spray has been marketed since 2008, the product was licensed to Boehringer Ingelheim for Europe, Russia and CIS, South America, parts of Asia and Australia in 2010.

Mayne Pharma - Astrix® 100 mg capsules contain aspirin presented as enteric coated extended release pellets. The Astrix® formulation is distinctly different from other aspirin formulations. It is a formulation specifically designed to optimise the cardioprotective effects of aspirin and to reduce the risk of gastrointestinal irritation that can occur with this drug. On market in a number of territories.

Omega Pharma - Couckinvest, the largest investor, of this Belgian company, has offered a premium to purchase the remaining part of the company it does not own. KBC is advising the board of directors. Omega sells OTC medicines in Europe.

Pfizer - considering the divestiture of a number of OTC brands such as ChapStick.

Pharmena - bundle of dermatology products that are currently sold in Poland. These products are IP protected and well suited to either an OTC or physician office promotion setting. Looking for an international partner to commercialize. For further discussions contact Tom Bird of Torreya Partners at tom.bird@torreyapartners.com.

PLX Pharma - Developing a GI-sparing aspirin product, PL 2200 which is close to market introduction. Phase I human bioequivalence and anti-platelet effects study completed. Update: Company likely to enter into a partnership deal in Q4 2010.

Ritter Pharma - Markets Lactagen, a product for the prevention of lactose intolerance with high efficacy.

ScarGuard - Could consider a company sale. Markets ScarGuard a widely used scar remedy as an OTC product.

Semprae Laboratories - markets Zestra, an OTC product for female sexual arousal enhancement. This product is backed by clinical studies showing its efficacy. Company is open to promotional or partnership deals. Update: Partnership outside of U.S. pending.

Undisclosed party - looking to sell a portfolio of marketed prenatal vitamins with assistance from Torreya Partners. Interested parties should contact Tom Bird (tom.bird@torreyapartners.com).

PAIN PRODUCTS

AcelRx - Looking for strategic partners for three pain products including ARX-01 (completed Phase 2), the Sufentanil NanoTab PCA System, for post-operative intravenous patient-controlled analgesia; ARX-02 (completed Phase 2), a sufentanil for breakthrough pain and ARX-03, a sublingual sufentanil / triazolam designed to provide non-invasive mild sedation, anxiety reduction and pain relief in patients prior to a painful procedure in a physician's office. (Link)

Acino Pharma - markets a fentanyl patch which is in Phase 3 in the U.S. and a diclofenac gel. (Link)
Afferent Pharmaceuticals - Developing P2X3 receptor antagonist for pain. A recent preclinical study indicated that a P2X3 antagonist significantly prevented and reversed bone cancer pain behavior in comparison to vehicle controls. (Link)

Akela Pharma - Pursuing Fentanyl TAIFUN for treatment of cancer pain. This product has been licensed to Teikoku for Japan and to SK Chemicals for Korea. (Link)

**UPDATE** Altea - AT3022 is being developed as a transdermal patch using passport patch/micropor system for the safe and rapid management of moderate to severe chronic pain. Note: AlteaTherapeutics - has agreed to shutter its operations according to a story published in the Atlanta Business Chronicle on Dec 9, 2011.

Amarin Tech SA - Offers several pain products ready for licensing including a transdermal device containing diclofenac diethylamine together with permeation enhancers. This product is in Phase 1 studies. HELM AG purchased 30% shareholding of Amarin in December, 2010.

Amarin Tech SA - Offers a transdermal fentanyl patch that is in Phase 1 studies to be shown bioequivalent to Durogesic®. (Link)

Ampio - On July 5, 2011 Ampio Pharmaceuticals, Inc. announced treatment of the first patient in the three-arm, placebo controlled, 60 patient Phase Ib Ampion-In-Knee (AIK) trial for osteoarthritis pain in Australia. (Link)

Archimedes Pharma - Is seeking licensees for North America and Japan for PecFent, a nasally-delivered fentanyl product for breakthrough cancer pain, currently in Phase 3 development. Archimedes Pharma is seeking licensees outside of Europe for PecFent®. Has gained a positive opinion from the CHMP, and has been filed for regulatory approval in the US. Preparing for a U.S. launch.

Arcion Therapeutics - Topical clonidine (ARC-4558) gel for the treatment of diabetic neuropathy (US Patent 6,534,048). In partnership discussions. Company has shown good response in patients with intact nociceptive function. Presentation on positive results in diabetic nephropathy at ADA in June 2011. (Link)

Array BioPharma - Oral p38 inhibitor has shown significant analgesic benefit in a recent Phase 2 trial in dental pain. A subsequent Phase 2b trial has shown a significant analgesic benefit in surgery patients versus celecoxib. (Link)

ARTYX Pharma - ART144 is in Phase II/III development. ART144 is is administered by injection into the joint and has proven to be safe and effective in two clinical studies. (Link)

**UPDATE** BioDelivery Sciences - running a fully enrolled Phase 3 clinical trial assessing the efficacy and safety of BEMA Buprenorphine for the treatment of moderate to severe chronic pain. In September 2011, BDSI reported that it had missed the primary endpoint of improving mean pain intensity scores vs. placebo in the Phase 3 BUP-301 trial to treat moderate to severe chronic low back pain. As a result, BioDelivery plans to conduct a second Phase 3 trial for the product, which the company said will delay an NDA submission to FDA by about one year. (Link)

BTG - BTG-1531. This NCE is a proprietary EP4 antagonist with potential applications in inflammation, pain and CNS (including MS). Clinical data is available from several studies. (Link)

Cadence Pharma - Acetavance (OFIRMEV®) approved. Company is launching drug in the hospital market with potential blockbuster status. No indication of interest in a sale at present. (Link)

Cara Therapeutics - CR845, a selective kappa opioid agonist, has completed a Phase 1 study. Phase 2 studies were positive. Specifically, CR845 provided evidence of analgesic efficacy when administered as a single intravenous dose to women following laparoscopic hysterectomy. In addition to decreases in reported pain levels, patients receiving CR845 required substantially lower amounts of postoperative opioids for 16 hours, and showed a
significant reduction in the incidence of postoperative nausea. See a similar molecule in testing by Tioga Pharmaceuticals (GI section). (Link)

Cerimon - a once-daily diclofenac topical patch for musculoskeletal pain that requires a phase 3 trial for FDA approval. This product has been on the market in Japan since 2004, selling over 700 million units. The product has been tested in the US in over 700 patients in seven clinical trials and Cerimon has rights in the U.S. and EU. Company is open to change of control transaction. (Link)

Charleston Laboratories - CL-108 contains hydrocodone, acetaminophen and promethazine being developed as specialized tablet formulation and release technology for the treatment of moderate to severe pain while reducing or eliminating opioid induced nausea and vomiting (OINV). In pivotal study for approval as a 505(b)2. (Link)

Chlorion Pharma - Novel modulator KCC2 (CLP635) for control of neuropathic pain. No clinical data reported as of yet.

Collegium Pharma - COL-003 is a tamper resistant, abuse-deterrent, sustained release oxycodone formulation. Seeking a partnership.

Colucid Pharmaceuticals - Lasmitidan, a novel drug for migraine, selectively targets 5HT1F receptors expressed in the trigeminal nerve pathway is entering Phase 3 trials. Company open to partnering or sale transaction. (Link)

UPDATE Covidien Pharmaceuticals - According to the New York Times on June 7, 2011 “Covidien, the health care company spun out from Tyco four years ago, may seek to sell its pharmaceutical unit...” This division of Covidien (formerly Mallinckrodt) has a major business selling pain products (both branded and generics) and imaging products. Revenues are around $2 billion. Update: As of December 2011 no sale has taken place. Company is rumored to be interested in a sale of the whole business (rather than pieces) for a full price. YE 2011 numbers reported on Nov 15, 2011 and were robust (sales up 9% yoy) with strong performance in generics.

Creabilis - CT327 is a novel topically applied TrkA kinase inhibitor developed using Creabilis’ LSE (Low Systemic Exposure) technology. CT327 contains pegylated K252a, which interacts at a nanomolar level with tyrosine kinase receptor (TrkA), the receptor for nerve growth factor (NGF). It has strong analgesic activity and it acts by blocking NGF activity. Good results in Phase 2a psoriasis study versus placebo. Also positive data in study versus atopic dermatitis. High potential for the treatment of neuropathic pain. (Link)

Crystal Genomics - CG100649 is a next generation NSAID which inhibits COX-2 in the inflammatory joint, but not in the cardiovascular and gastrointestinal systems. Positive Phase 2a data.

Dara Therapeutics - in Phase 2a studies of KRN5500 for neuropathic pain in cancer patients. KRN5500 is a novel spicamycin derivative produced by Streptomyces alanosinusicus and is available as a solution for intravenous (IV) administration. (Link)

Dharma Therapeutics - Developing a lidocaine patch using iontophoretic technology. Positive Phase 2b data in a recent trial. (Link) (noncon)

Durect - Transdur Sufentanil for the treatment of pain. Longer duration than fentanyl patches and smaller patch size. On May 5, 2011 the company wrote: “We continue discussions with potential partners regarding licensing development and commercialization rights to this program to which we hold worldwide rights.”

Egalet - Licensing Phase 2 abuse resistant morphine (EG-P066) with strong data. Also has best-in-class abuse resistant hydrocodone product in late Phase 1. Active process underway via Torreya Partners.

Elite Pharmaceuticals - Phase 3 abuse resistant oxycodone for OA under an SPA. Company exploring strategic options. Nov 15, 2010 update: “The company is currently in discussions to license its once daily oxycodone
product, ELI-154 to a European marketing partner and is progressing towards scale-up in the development of its abuse-resistant formulation of oxycodone, ELI-216.” (Link)

Epicept - NP-1 cream for neuropathic pain (4% amitriptyline and 2% ketamine) has been used in 850 patients in seven Phase 2 trials and has was superior to placebo and non-inferior to gabapentin. Has orphan for PHN. Active partnership discussions underway.

NEW Gedeon Richter - Orally active non-peptide selective Bradykinin B1 receptor antagonist for the treatment of chronic and inflammatory pain. Lead indication is osteoarthritis.

$ Horizon Pharma - launching Duexis®, a fixed dose combination of ibuprofen and famotidine for the relief of the signs and symptoms of rheumatoid arthritis and osteoarthritis and to decrease the risk of developing upper gastrointestinal ulcers. This company is preparing to go public and does not have a known process underway to seek a buyer. A related program is underway at Logical Therapeutics.

$ Innocol - CollaRx Bupivacaine Implant provides pain relief directly at the surgical site. Phase 2 underway.

Intelgenx - Has completed a Phase 1b trial of Relivar, a buccal dronabinol (THC) tablet for neuropathic pain. (Link)

Japan Tobacco - JTS653 is a Phase 2 oral TRPV1 antagonist (Transient Receptor Potential Vanilloid subtype 1 antagonist). It reduces pain via antagonism of TRPV1 on sensory neurons. JTS653 is being developed as oral formulation for the treatment of pain.

$ Kai - KAI-1678 is an isozyme-selective, small peptide inhibitor of the epsilon protein kinase C pathway. Would look to partner after current Phase 2a trial completes.

KemPharm - KemPharm, Inc. announced positive results from a Phase I clinical trial of its most advanced opioid-based drug candidate, KP201, a novel hydrocodone prodrug for treating pain. KP201 is a new chemical entity (NCE) composed of hydrocodone chemically bound to a ligand. (Link)

Labtec - Sufentanyl patch for topical pain relief in phase 1 studies.

MAP Pharma - Would look at ex-U.S. partnerships for its late stage inhaled migraine drug, Levadex. NDA submitted in May 2011. In January 2011 the company entered into a promotional agreement with Allergan who will promote this product in the U.S. to headache specialists. MAP received $60 million upfront as part of the consideration for this agreement. MAP Pharma retains other physician markets in the U.S. and rights in all other geographies. (Link)

Mika Pharma - Diclofenac spray. Approved in EU. In Phase 3. Note: Giuliani S.pa. bought a majority stake in Mika in 2010. (Link)

NeurAson - NXN-188, a first-in-class, dual-action drug being developed for the treatment of acute migraine. Oct 31, 2010: “The primary endpoint in this study was Pain Relief at 2 hours: although NXN-188 did not reach significance at this time point (p=0.0801), a statistically significant response was reported from 4 through 24 hours.” (Link)

$ Neurogesx - Qutenza is a patch that delivers synthetic capsaicin for PHN on the market in U.S. Recently approved. Partnered in the EU to Astellas in June 2009. Company looking for partnerships in Asia and Latin America. (Link)

UPDATE Neurotune - Positive top-line results from its Phase IIa study of dimiracetam (NT-11624) for treatment-induced neuropathic pain in HIV patients receiving anti-retroviral medication. Phase 2b study to start in 2012 under recently granted IND. (Link)
NuPathe - Recently went public with Zelrix, a promising late stage candidate for migraine (iontophoretic sumatriptan patch). NDA filing in Oct 2010 with PDUFA date of August 29, 2011. FDA issued a complete response letter requesting additional CMC and early stage clinical work. Company is open to strategic discussions.

Pacira Pharmaceuticals - Looking to partner Exprarel, a long acting bipuvicaine, outside of the U.S. This product was approved by the FDA on Oct 31, 2011. Interested parties should contact Darren Pincus at DarrenP@pacira.com.

Paion - Looking to out license an active potent metabolite of morphine, morphine-6-glucuronide (M6G) which may have an equivalent analgesic effect as morphine, but with a reduced tendency to cause nausea, vomiting and respiratory depression. Two Phase 3 trials have been completed. Missed endpoint in one trial. (Link)

Paion - Looking to outlicense Remimazolam based on the available Phase 2 data for the drug as a short-acting intravenous anesthetic/sedative for endoscopy procedures. Positive data were reported out in Nov 2009. Further positive Phase 2b data in colonoscopy reported in Nov 2010. In 2009 entered into license agreement with Ono Pharmaceutical to develop and commercialize Remimazolam in Japan. Received second milestone payment in May 2011 through start of Phase 2 clinical trials. Update: In a November 2011 press release, Paion indicated that discussions continue with potential partners for this drug. (Link)

Phoenix Pharmalabs, Inc. - developing novel family of ligands with high binding affinity and balanced activity at all three opioid receptors.

Phosphagenics - in a 65-patient Phase 2 trial to examine the safety and tolerability of its Oxycodon chronic pain management patch.

QRX Pharma - When compared at equianalgesic doses with Percocet, MoxDuo IR demonstrated greater overall tolerability with substantially less side effect. Has finished enrollment of its first Phase 3 study as of Dec 6, 2010 and filed for FDA approval. Open to partnership deals, particularly in China. (Link)

Prophase Labs - Would consider sale of Pharma division. Lead drug is QR-333 in Phase 2 for diabetic neuropathy. Update: Prophase indicated in Q4 earnings release that is not making further investment in this division (known as Quigley Pharma).

Raptor - Looking to divest its pain products that were picked up in an acquisition of Torrey Pines Pharma. Tezampanel, an intravenously administered compound, and NGX426, the oral prodrug of tezampanel, are first-in-class compounds that may represent novel treatments for both pain and non-pain indications. Tezampanel and NGX426 are ionotropic glutamate receptor antagonists that target the AMPA and kainate sub-type receptors. Tezampanel has been through Phase 2b studies. (Link)

RaQualia - Developing EP4 receptor antagonists for the treatment of inflammatory pain. Past POC stage. Update: August 2010 - licensed the Japan and East Asia rights to this treatment to Maruishi Pharma of Japan. Raqualia had a successful IPO in July 2011. (Link)

SantoSolve - Looking to partner 2PX, a topical formulation of strontium, for neuropathic and OA pain control. Statistically and clinically significant Phase 2 improvements in WOMAC scores observed. (noncon). Currently in a large multinational Phase 3 trial for the treatment of OA. (Link)

Spinifex Pharmaceuticals, a private, Australia-based biotech, is developing EMA401, in Phase 2 for post-herpetic neuralgia (PHN). Data expected in the first half of 2012.

Star Laboratories - Ibuser is being developed as pediatric ibuprofen drops oral suspension (40mg/ml) for the treatment of pain.

Undisclosed - Active dexamethasone patch with positive Phase 2 data and an associated technology platform.
Undisclosed player - open to a merger or sale of $35mm revenue company with commercial presence in the U.S. pain market. Torreya Partners advising.

**NEW $** Undisclosed player - very promising Phase 2 product for treatment for OA using an alternative to Synvisc®. Using a financial advisor to find a buyer or partner.

$ Undisclosed player - approved hospital anesthetic in the United States with differentiation from existing products. Also could be used in physician office setting where sedation required. Open to a product sale or other value creating arrangement. Global rights available.

Vyteris - has indicated that it is interested in disposing of a portfolio of pain products in development. These products include LidoSite®, an FDA approved product for the pretreatment of needle injection and venipuncture sites with Lidocaine (a related product is at Nuvo Research); a Phase 1 zolmitriptan patch and an NSAID patch. ([Link](#))

Winston Pharmaceuticals - Rheumaderm cream for the treatment of OA. NDA pending. Marketed in Canada by Sanofi. Based on civamide which acts on type-C neurons by specific binding to a membrane receptor, the TRPV-1 receptor. Looking for licensing partners in other parts of the world. ([Link](#))

Winston Pharmaceuticals - Also pursuing Civamide, a TRPV-1 modulator, for the treatment of episodic cluster headaches. Late stage with approval pending in Canada. ([Link](#))

Xenome - **Xen2174** is a peptide that binds to norepinephrine transporter (NET), blocking its ability to remove NE from the synapse. Positive Phase 2 data in severe cancer pain.

YM Biosciences - Is currently seeking a partner for AeroLEF, a Phase 3 ready inhaled composition of free and liposome-encapsulated fentanyl, for the treatment of moderate to severe acute pain.

Zalicus - Promising **T-Type CCB** program for the treatment of pain, epilepsy and hypertension. Very promising albeit early technology. Going into Phase 1 studies in 2011. ([Link](#))

Zogenix - **Sumavel**, a needlefree transdermal delivery of sumatriptan for migraine. Recent FDA approval with product launch using Astellas as a co-promotion partner. Company could consider an M&A transaction. Note: Raised $30mm from Cowen Healthcare Royalty Partners in July 2011.

**PEDIATRICS**

13Therapeutics - Developing P13 as a treatment for Acute Otitis Media (AOM). Many colds in young children are accompanied by ear infections. P13 is an orally available anti-inflammatory 20 amino acid peptide derived from a viral regulatory protein. Company entering Phase 1 studies. ([Link](#))

Adams Pharmaceuticals - Launching Epinephrine Injection USP 1:1000 (0.3mg Pre-Filled Single Dose Syringe) (i.e.: Epinephrine Injection PFS) to compete as a low cost alternative to the well known brand EpiPen®.

**NEW** Althea Technologies - has a promising phase 2 extended release version of human growth hormone in development. Previously this compound was at Genentech.

AmpliPhi - Formerly Targeted Genetics. Preparing for a Phase 3 trial of Biophage-PA for the treatment of otitis media. Also effective in cystic fibrosis. BioPhage-PA is a mixture of six bacteriophages that destroy Pseudomonas aeruginosa. Bacteriophage or phages are naturally occurring viruses that consist of an outer protein hull enclosing genetic material. ([Link](#))

Ascendis - In Phase 2 studies with a pegylated human growth hormone.
Asklepion - L-Citruline for the 20 percent of children who have heart surgery with use of the bypass pump develop pulmonary hypertension, or high blood pressure in the lungs. In early studies this product appears to prevent pulmonary hypertension from developing. Now in Phase 3 studies. (Link)

BCO Pharma - Phase 3 ready program for the treatment of hypotension in neonates. Novel presentation of existing hypotensive agent. (NEW)

Biopartners - In late stage trials with a sustained release version of human growth hormone. (Link)

Discovery Labs - is currently engaged in partnership discussions with respect to licensing its entire neonatal franchise, which includes Surfaxin, Surfaxin LS and Aerosurf. Want a partner to collaborate on clinical development for Surfaxin LS and Aerosurf, and to play a central role in commercialization for all three products. Surfaxin is a synthetic KL4 Surfactant for treatment of neonatal RDS. Company expects to refile for approval in Q1 2011. January 2011 receives US patent for pulmonary surfactant and Protase inhibitor combination.

Foresight Biotherapeutics - Has recently completed a Phase 3 trial of FST-201 (dexamethasone 0.1%) Otic Suspension vs. the FDA-approved drug Ciprodex (ciprofloxacin 0.3%, dexamethasone 0.1%) Otic Suspension (Alcon Laboratories, Inc.) in the treatment of acute otitis externa (Swimmer’s ear). Each year, approximately two million children who suffer from persistent ear infection in the U.S are diagnosed with acute otitis media requiring tympanostomy tubes (AOMT). (Link)

KemPharm - KP106 is a novel prodrug for the treatment of attention-deficit hyperactivity disorder (ADHD). KP106, a new chemical entity (NCE), is composed of the active pharmaceutical d-amphetamine and a ligand and was created through application of KemPharm’s proprietary Ligand Activated Therapy (LAT) approach. Positive Phase 1 data. (Link)

Marinomed Biotechnologie - The privately-held Austrian biopharmaceutical company is in talks with pharma players to outlicense its lead compound MAM-05.101, an antiviral nasal spray for the treatment of the common cold - particularly in children. This product is a GRAS botanical and has shown good efficacy in a Phase 2 type trial. Can likely be introduced to the market now as either an OTC product or medical food.

Meritage Pharma - Positive Phase 2b data on effect of oral viscous budesonide (OVB) an oral formulation of budesonide for the potential treatment of patients with eosinophilic esophagitis (EoE). (UPDATE)

Nextwave - Novel, sustained release liquid formulations of several Rx and OTC pediatric products in late stage development. Nexiclon XR now on the market and available for treatment of hypertension in kids. (Link)

Orphan Drugs NL BV - Developing levamisole for the treatment of steroid resistant nephrotic syndrome in children (a grouping of diseases including FSGS, membraneous nephropathy). Has enrolled 50 patients and this product is available in Europe on a named patient basis. Strong evidence of efficacy in past studies. Not licensed outside of EU. (Link)

Piedmont Pharmaceuticals - Have a late stage product for treatment of head lice. Partnered and marketed in Europe. RESULTZ is sold internationally through licensing partners. Looking for other partners.

Psychogenics - Pursuing eltoprazine in Phase 2 studies for ADHD. Supportive Phase 2a data. (Link)

Star Laboratories - Ibuser is being developed as pediatric ibuprofen drops oral suspension (40mg/ml) for the treatment of pain.

Topaz Pharma - completed two Phase 3 studies for the treatment of head lice with Ivermectin. Planning to submit NDA to FDA in 2011. (Link)
Undisclosed player - selling off $20mm revenue+ commercial product for narrow market with pediatric applications.

NEW Undisclosed player - specialty pharma company in the pediatric area open to a sale transaction.

Undisclosed player - selling off portfolio of $50mm area specialty pharma products with some pediatric products included.

Undisclosed player - has rights to a Phase 3 ready long acting human growth hormone.

**PROTEIN PLATFORMS**

Ambrx - Very exciting platform technologies with multiple applications which allow engineering of proteins developed in both eukaryotic and prokaryotic cells including an antibody drug conjugate program for oncology. Ambrx interested in a broad strategic alliance that would allow it to expand its platform.

Anaphore - pioneering Altrimers®, a new class of protein therapeutics that has a trivalent structure. Better ability to lock on to a target. Working on a number of targets including a TRAIL-R antibody for oncology that is pre-clinical. ([Link](#))

Chiome Bioscience - Can develop antibodies against rare and difficult antigens using its ADLib technology. January, 2011 entered into new license agreement for joint invention with RIKEN, which allows Chiome to generate, develop, commercialize, or out license antibodies through preferential use of ADLib system and to license out ADLib for the life of the patent. ADLib system is an innovative technology for preparing antibodies by activating homologous recombination in avian DT40 cells.

Pepscan Therapeutics - Strong platform for the generation of peptides and antibodies that target antigens and proteins. Willing to collaborate on specific targets. ([Link](#)) Recently just hired a new CEO.

Sembiosys - APOa1 is a injectible protein that leads to atherosclerotic plaque regression. Preclinical version of protein is available with very strong proof of principal data. Company Update: Oct 1, 2010: “SemBioSys Genetics ... announced that it has retained Deloitte & Touche Corporate Finance Canada, Inc. to advise the Company in matters of potential strategic alternatives being considered by the Company and its board of directors.” Update: June 2011 - no sale took place but company raised $4mm in additional capital. ([Link](#))

Symphogen - Novel polyclonal antibody technology platform with a promising antibody in development for RSV (Sym003), still in the pre clinical stage.

**RENAL / NEPHROLOGY**

Action Pharma - AP214 finished Phase 2, a modified dMSH-peptide analogue, for the treatment of post-surgical kidney injury in the cardiac surgery context. The results demonstrate that AP214 is well tolerated and safe at all three dose levels. At the highest dose level, AP214 prevents the increase in serum creatinine by 50-60%, and in the IL-6 response by 30-40%, compared to placebo (trends based on blinded data). This is consistent with a robust effect to prevent postsurgical acute kidney injury (AKI) and systemic inflammatory response.

UPDATE Akebia - Positive Phase 2 with a HIF modulator for the treatment of anemia. Originally developed at P&G Pharma. Open to a licensing deal in but could consider other possibilities including a change of control. Company expects to report a second Phase 2 trial dataset in March 2012. ([Link](#))

UPDATE $ AMAG - Feraheme IV iron product - Recently approved. Company is commercializing on its own. AMAG’s recent merger attempt with Allos was ended in November 2011. On Nov 17, 2011, AMAG announced that it had hired Jefferies to explore all opportunities to enhance shareholder value. Frank Thomas, interim CEO of AMAG
indicated: “We will expeditiously complete this process, which will include a parallel review of a potential sale of the company and other strategic merger and acquisition transactions.”

**UPDATE** AM-Pharma - Has achieved highly positive Phase 2 results in the treatment of acute kidney failure with alkaline phosphatase. Company advancing a backup program with stronger patent protection. ([Link](#))

Angeli - Bindarit inhibits mcpt-1/CCL2. A Phase 2 clinical pilot study in lupus nephritis (LN) patients demonstrated that subject treated with bindarit showed a significant reduction of urinary albumin excretion (UAE) and urinary MCP-1/CCL2 levels. Promising data in diabetic nephropathy. Going into Phase 3 studies. ([Link](#))

Angion Biomedica - In a Phase 2a study of BB3 (a hepatocyte growth factor mimetic) to improve renal function in patients with signs and symptoms of significant renal injury after kidney transplantation and at risk for dialysis. ([Link](#))

Chimerix - **CMX001** is a lipid mimic of cidofovir that more easily passes into cells and then targets double viruses including herpes viruses and orhoproxviruses. Current in Phase 2 against CMV and BK virus. A recent trial showed that this drug works better than existing antivirals in persons with impaired renal function. Recently commences Phase 2 trials in study for prevention of AdV in hematopoietic stem cell transplant patients. Also received Fast Track designation for this indication from FDA in July 2011. In active partnership talks. Also in development for smallpox. ([Link](#))

**NEW** Concert Pharma - On Nov 14, 2011 announced data from a Phase 1 clinical trial of CTP-499, a novel agent for the potential treatment of diabetic nephropathy. The results demonstrated that a controlled-release formulation of CTP-499 was well-tolerated at single doses up to and including 1800 mg. Concert expects to initiate a Phase 2 clinical trial of CTP-499 in patients with diabetic nephropathy during the first half of 2012. ([Link](#))

Cormedix - **CRMD-001** (a proprietary formulation of deferiprone) is in a randomized, double-blind, placebo-controlled Phase 2 clinical trial for the prevention of contrast-induced acute kidney injury in approximately 60 high-risk patients with chronic kidney disease (CKD). Company recently went public.

Endacea - developing L-97-1, as an oral treatment for renal impairment with HF. This is a preclinical A1 adenosine receptor antagonist. ([Link](#))

Evolva - In Phase 1 for **EV-077**, an oral thromboxane inhibitor, for diabetic nephropathy. In December 2010 reported that had carried out further formulation work and had confirmed that it had found a well behaved formulation of this drug in a Phase 1 study. ([Link](#))

**NEW** FibroGen - Would consider outlicensing **FG-3019** anti-fibrosis compound. Novel mechanism based on CTGF. Update: FibroGen (like Akebia above) is developing HIF modulators for the treatment of anemia. At November American Society of Nephrology meeting reported strong positive Phase 2b type data for FG-4592. Able to correct anemia reliably in CKD patients without safety problems.

**NEW** Fibrotech - Has commenced manufacturing and non clinical toxicology for FT011, an antifibrotic for the treatment of diabetic nephropathy. Clinical trial due to commence in Q1 2012. ([Link](#))

**UPDATE** Kai Pharma - Positive Phase 1b and Phase 2 data for KAI-4169, a novel IV agent being tested for the treatment of secondary hyperparathyroidism, a frequent complication of end stage renal disease. KAI-4169 also is being developed as a transdermal patch product for daily administration in the treatment of Stage 3 and 4 CKD-MBD pre-dialysis patients. In June 2011, announced promising results of KAI-4169 program for treatment of CKD-MBD and presented Phase 2 data in poster at ASN in Nov 2011. Demonstrated a dose-dependent relationship between KAI-4169 exposure and reductions in serum parathyroid hormone (PTH) levels in healthy young males following single-dose administration. Company open to partnering this product, or possibly, a change of control transaction. In Sep 2011 partnered this product in Japan with ONO. ([Link](#))
**UPDATE** Keryx - In Phase 3 with Zerenex, a ferric citrate for treatment of hyperphosphatemia in ESRD. May, 2011 announced it received positive Scientific Advice from the European Medicines Agency (EMA) for the development of Zerenex for the management and control of serum phosphorus in end-stage renal disease (ESRD) patients undergoing dialysis, and in pre-dialysis chronic kidney disease patients (CKD). The Scientific Advice from the EMA indicates that the Company’s current Phase 3 program in the United States, if successful, in conjunction with safety data generated from other clinical studies with Zerenex, is considered sufficient to support a European marketing authorization application (MAA) to the EMA for the indication in ESRD patients on dialysis. Expects to file an NDA assuming positive data by mid-2012. This product is partnered in Japan to Japan Tobacco.

**NEW** NephroGenex - developing Pyridorin for the treatment of diabetic nephropathy. On November 9, 2011 the company announced that it has reached an agreement with the FDA on the design of a new Phase 3 Subpart H program for approval based on serum creatinine.

Noxxon Pharma - Developing NOX-E36, an inhibitor of Monocyte Chemoattractant Protein 1 (MCP-1). Currently completing a Phase 1 study for its indication of treating diabetic nephropathy. Open to a deal. ([Link](#))

Orphan Drugs NL BV - Developing levasimole for the treatment of steroid resistant nephrotic syndrome in children (a grouping of diseases including FSGS, membranous nephropathy). Has enrolled 50 patients and this product is available in Europe on a named patient basis. Strong evidence of efficacy in past studies. Not licensed outside of EU. ([Link](#))

Osprey Pharma - CCL2-LPM, looking for partner to take fusion LPM compound for IgA nephropathy into Phase 2.

Pervasis - Developing Vascugel, a cell therapy product, to accelerate vein remodeling for patients receiving an AV fistula (AVF) in end stage renal disease. Compare to Proteon Therapeutics which has optioned a product for the same indication to Novartis.

**UPDATE** Raptor Pharmaceutical - likely to be able to file for NDA of DR Cysteamine, which is delayed-release, enteric-coated microbead formulation of cysteamine bitartrate for the treatment of cystinosis. In June 2011, Raptor reported positive data from a pivotal, Phase 3 clinical trial, examining the safety and tolerability of every 12-hour DR Cysteamine compared to immediate-release cysteamine bitartrate (the current standard of care) in nephropathic cystinosis patients. Company intends to self-commercialize this product. ([Link](#))

Reata - positive phase 2b data for bardoxolone methyl for diabetic nephropathy. Bardoxolone methyl is an antioxidant inflammation modulator (AIM) that activates Nrf2, thereby inducing the transcription of more than 250 genes that decrease the level of oxidative stress and suppress several inflammatory mediators. Partnered outside the U.S. to Abbott and to KHK in Japan. Planning to self-commercialize in the U.S. upon approval. ([Link](#))

Relypsa - positive Phase 2 data achieved for a potassium binder to treat hyperkalemia which is prevalent in persons with end stage renal disease and those with congestive heart failure. Large market potential. Company recently raised $70mm to get through Phase 3 studies of this promising treatment. ([Link](#))

Rockwell Medical Technology - Going into Phase 3 for Soluble Ferric Pyrophosphate (SFP), a novel continuous iron-replacement therapy designed to treat iron deficiency anemia in hemodialysis patients. Recently had a satisfactory end of Phase 2 meeting with FDA. Ongoing Phase 3 efficacy study. Anticipate SFP commercial launch U.S. (upon FDA market approval est. 2013).

Sorbent Therapeutics - Oral, non-absorbed polymer for treatment of diseases with fluid, potassium or sodium imbalance. Has completed Phase 1 and is intended for persons with ESRD. Update: Company completed a financing round in September 2010 which will facilitate going forward into further clinical trials. Update: June 30, 2011, Sorbent Therapeutics completes $36 million Series B Financing for a net raise of $53 million.
Spectrum Pharmaceuticals - Looking for a ROW partner for RenaZorb™, a preclinical second generation lanthanum-based phosphate binding agent. (Link)

Tengion - Leading regenerative medicine company open to partnership deals for the development of both an artificial bladder and an artificial kidney. Tengion has recently gone through a leadership transition and plans an FDA meeting to discuss the kidney program before the end of 2011. (Link)

Toray Pharma - has recently reacquired rights to a promising Phase 2 compound for the treatment of uremic pruritis from Acologix. On the market in Japan as REMITCH through Japan Tobacco’s Torii subsidiary. U.S. and European rights are available. (Link)

Trevi Therapeutics - Preparing to dose T111 in a Phase 2 trial for chronic uremic pruritis to determine proof of concept for safety and efficacy. (Link)

Veloxis - Positive top-line results from a Phase 2 clinical trial involving 63 patients comparing LCP-Tacro™ tablets administered once daily versus Prograf® (tacrolimus) capsules (Astellas Pharma) administered twice daily in de novo kidney transplant patients. Currently in Phase 3 clinical trials for treatment of kidney transplant patients with NDA/MAA submission in the US and EU expected in Q1 2013.

Vitae Pharmaceuticals - VTP-27999 is a novel, potent and selective renin inhibitor offering the potential for superior renal protection in patients suffering from chronic kidney disease. The compound is expected to enter Phase 2b in early 2012 and has shown impressive performance in studies to date. (Link)

Y’s Therapeutics - YSPSL is fused P-selectin glycoprotein ligand (PSGL) and human IgG1. It acts as an antagonist of P-selectin. This is currently in Phase 2 studies for prevention of delayed graft function and prevention of IRI in transplant patients.

ZS Pharma - Potassium and ammonium binders. In Phase 1 studies after a recent funding round. Related potassium binders at Relypsa and Sorbent Tx.

RESPIRATORY

Actelion - Phase 2 with a novel CRTH2 antagonist with met its primary endpoint in study results reported in May 2011. A Phase 2 dose-finding study in asthma is currently enrolling and is expected to report results mid-2012. Would prefer to wait for full Phase 2 data prior to partnering this compound.

Adamis Pharma - developing an inhaled nasal steroid for the treatment of allergic rhinitis and a metered dose inhaler for asthma and COPD. Going into Phase 3 studies. (Link)

Aerovance - Exploring partnering / sale options with positive Phase 2b data for AEROVANT, an asthma drug which is an inhibitor of the IL-4 and IL-13 receptors. As of June 7, 2010, Phase Ib clinical trial results showed Aerovance’s Aerocant is effective in patients with Eosinophilic Asthma.

Allergy Therapeutics - Pollinex Quattro in the treatment of seasonal allergic rhinoconjunctivitis (“SAR”) caused by grass pollen has successfully completed a Phase 3 study. Partnered in Canada to Takeda. Company open to partnering rights in the U.S. Negotiating a protocol with FDA and anticipates lift of clinical hold on its program. (Link)

Almirall - Looking to partner LAS100977, once daily long acting beta agonist. Recently shown positive data in a Phase 2 study for asthma and COPD. Partnered in Japan to Kyorin and in the U.S. to Forest. (Link) EU rights available.
AIM Therapeutics - AIM-102 is a non-steroidal, anti-inflammatory drug which acts by modulating inflammatory mediators such as eosinophils, neutrophils and macrophages. In Phase 2 development for asthma and COPD.

Anergis - Developing 5-injection/2-month specific immunotherapy therapy with its lead product AllerT for birch pollen. Positive Phase 2 data. (Link)

Argenta Discovery - In Phase 2a for ADC-4022 for COPD.

Amira Pharmaceuticals - Pre-clinical DP2 program in leukotriene pathway for prevention of asthma. Recent related deal with GSK. High potential.

APT Pharma - Positive Phase 2 results for Pulminiq - an inhaled cyclosporine for preventing lung transplant rejection. Currently in a fully enrolled Phase 3 trial. Data has not been reported out as of December 2011. (Link)

Aradigm - Strong Phase 2b data of once daily inhaled ciprofloxacin in bronchiectasis and cystic fibrosis. Also has a Phase 1 inhaled nicotine program. (Link)

Arriva Pharmaceuticals - Inhaled protein rAAT (Respiva) replacement therapy for hereditary emphysema, completed two early Phase 2 trials and recently completed manufacturing with a more highly purified and higher yield recombinant alpha 1-antitrypsin for upcoming clinical trials. Company is looking at a partnership deal.

BioMarck Pharmaceuticals - In Phase 2 for BIO-11006 an inhibitor of MARCKS protein for oversecretion of mucus in COPD and CF. Recent Phase 2a data showed clinical significant effects on FEV-1. Statistical significance was dependent on the endpoint and population. (Link)

Biomay - developing products for grass and birch allergy. In Phase 2 and 3 studies. (Link)

Biota Holdings - Looking to partner a once weekly inhalable long-acting neuraminidase inhibitors for the treatment of flu. Would compete against Relenza from GSK. Currently partnered with Daichi-Sankyo in Japan. One of two Phase 3 studies have reported out with positive data - large market. (Link)

Biota Holdings - Also looking to partner a product to treat the common cold. Specifically, canyon-like clefts on rhinovirus surface attach to the receptor allowing infection. Biota achieved proof of concept in a Phase Ila (challenge study) in 2009. Now in Phase 2b studies for this product. (Link)

Biotie Therapies - ELB353 is a PDE4 inhibitor for treatment of inflammatory related diseases such as COPD. Has completed Phase 1 studies. Looking for a partner.

Cytos - looking to partner CYT003 for allergic rhinoconjunctivitis. Vaccine has finished Phase 2b studies. Asthma symptoms decreased by 33% under QbG10 treatment despite corticosteroid withdrawal, while they increased by 29% under placebo treatment (p=0.01). Use of relief medication doubled in the placebo group, while it remained stable in the QbG10 group (p=0.01). (Link)

Discovery Labs - is currently engaged in partnership discussions with respect to licensing its entire neonatal franchise, which includes Surfaxin, Sufaxin LS and Aerosurf. Want a partner to collaborate on clinical development for Surfaxin LS and Aerosurf, and to play a central role in commercialization for all three products. Surfaxin is a synthetic KL4 Surfactant for treatment of neonatal RDS.

Epigene 

**EPI-12323** is a once daily, small molecule, inhaled non-glucocorticoid steroid that targets the inflammatory and airway obstruction cascade in the irritated lung. Positive Phase 2 data in asthma and potential in COPD.

Ligand / CyDex - **CDX-313** (CE-budesonide and azelastine) CyDex is developing CDX-313 as a treatment for seasonal / perennial allergic rhinitis. Recently shown positive data in Phase 2 EEC study completed in 105 subjects.

Marinomed Biotechnologie - Privately-held Austrian biopharmaceutical company, is in talks with pharma players to outlicense its lead compound **MAM-05.101**, an antiviral nasal spray for the treatment of the common cold - particularly in children. This product is a GRAS botanical and has shown good efficacy in a Phase 2 trial. ([Link](#))

Medicinova - Would consider a partnership for **MN-221**, a selective β2-adrenergic receptor agonist being developed for the treatment of status asthmaticus. Phase 2b study underway.

N3O - N6022, is designed to treat asthma, chronic obstructive pulmonary disease, and inflammatory bowel disease. N6022 is a reversible inhibitor of GSNOR, which increases levels of GSNO, which helps maintain normal respiratory function. Going into Phase 1.

Ono Pharmaceutical - Has completed Phase 1 studies with ONO-4034, a PGD2 antagonist for the treatment of allergic rhinitis. An ex-Japan partnership transaction is possible.

Oxagen - **CRTH2** antagonists for asthma, allergy and respiratory disease. Phase 2a POC data with enrollment of a Phase 2b study recently completed. Exploring partnership/sale.

Palatin Laboratories - PL-3994 in phase 2 trial in stable asthmatics to determine if patients achieve a clinically meaningful increase in pulmonary function. Compound is a NPRA agonist. ([Link](#))

Pari - Looking to partner a Phase 3 **Tobramycin** for cystic fibrosis. Also developing a liposomal cyclosporine for lung transplant that is in Phase 2.

Pearl Therapeutics - Developing PT003, a fixed dose combination of glycopyrrolate and formoterol delivered via a pressurized hydrofluoroalkane metered dose inhaler (HFA-MDI). Good efficacy and differentiation signals in a Phase 2b clinical trial in patients with moderate to very severe chronic obstructive pulmonary disease (COPD). Results show PT003 provides safe and superior bronchodilation compared to the current market leader, tiotropium bromide (Spiriva® Handihaler®), as well as to formoterol fumarate (Foradil® Aerolizer®), placebo and the individual components of PT003 (p≤0.0002 for all comparisons). ([Link](#))

Pernix / SEEK Joint Venture - Looking to sell the rights to Theobromine for the treatment of cough with assistance of JP Morgan. Manfred Scheske, Chief Executive Officer of the SEEK/Pernix joint venture, commented: “We believe theobromine (BC1036) is a late-stage, low-risk asset and will be the first new treatment for cough in over 50 years.” Going into a Phase 3 clinical trial. As of November 2011, Pernix indicated: “Joint venture continues to evaluate opportunities and expects to continue discussions with interested parties to maximize the value of the Theobromine asset.” ([Link](#))


Pharmaxis - **TPI 1100** is a novel, potent, selective and dual-acting RNA-silencing oligonucleotide against phosphodiesterase isoforms PDE4 and PDE7. For COPD going into Phase 1.

Pharmaxis - **TPI ASM8** for mild to moderate asthma has been shown to be effective at very low doses in a first Phase II, placebo-controlled study that evaluated the effects of a once-daily (QD) inhaled dose of TPI ASM8.
Promedior - Developing recombinant human Serum Amyloid P Component for the prevention and treatment of fibrotic pathology including its manifestations in scarring associated with asthma and IPF. Would consider a corporate sale and is currently in active partnership talks after raising an additional $12 million. Company presented encouraging Phase 1b data at the American Thoracic Society meeting in May 2011.

Revotar - Bimosiamose, a pan-selectin antagonist, targeted against the selectin family of cell adhesion molecules, for COPD with promising Phase 2a data. Very strong Phase 2b data reported in May 2011. Open to partnership. (Link)

Serendex - inhaled rfVIIa for blast injury and lung bleeding. Six patient study showed high efficacy. Orphan designation granted. (Link)

SkyePharma - recently received rights to Flutiform® back from Abbott. This product is available for repartnering. FDA approval quite challenging. The inhaled drug, which is being developed for the treatment of asthma and chronic obstructive pulmonary disease, would if approved compete with Advair and Symbicort.

Stallergenes - Stalair® line of allergy products including ones aimed at rhinitis, asthma and mites. Late stage opportunity for a large market. Both specialty and potential primary care call points. Company recently indicated that it intends to pursue U.S. commercialization on its own. Currently looking for a China partner. (Link)

Syntaxin - Interesting albeit early program in COPD. The inhaled delivery of Syntaxin's novel proteins target respiratory epithelial cells controlling airway mucus hypersecretion in diseases such as COPD and bronchitis.

COMPLETED $ Undisclosed - marketed bronchodilator with revenues > $20mm. Company open to a product sale. Note: Graceway Pharma was sold to Medicis in Nov 2011, including its Maxair auto-inhaler.

$ Undisclosed - company that sells raw materials for allergy shots. Good revenue / profitability and potential for growth into the emerging market for FDA approved products.

$ Undisclosed - marketed product available on a co-promotion basis into the hospital setting for the prevention of acute allergy.

UPDATE Undisclosed - Phase 2 hospital product available for licensure for the treatment of acute allergy in the ER setting. Torreya Partners assisting. Interested parties should contact peter.garrambone@torreyapartners.com.

VentiRx - In October 2010 reported a positive proof of concept for TLR8 drug VTX-1463 in grass allergy. Data shown at AAAI in 2011 were impressive. (Link)

NEW Vernalis - V85546 - Phase 2-ready novel selective anti-inflammatory compound that selectively inhibits MMP12 and has in-vivo efficacy in pre-clinical models of Chronic Obstructive Pulmonary Disease (COPD), Multiple Sclerosis (MS) and liver fibrosis. Phase I SAD and MAD studies have been conducted. Substantial safety and tox package would support up to 6 month dosing in Phase II. Worldwide rights available. (Link)

UPDATE Verona Pharma - Willing to partner RPL554, a PDE3/4 inhibitor for asthma and COPD. Positive Phase I/IIa results. Data showed that FEV1 improved relative to placebo by up to 10%. (Link)

REVERSE MERGER CANDIDATES

La Jolla Pharmaceuticals - would consider a reverse merger transaction.

NEW Myrexis - good candidate for a reverse merger transaction. Company has substantial negative enterprise value as of Dec 2011.
UPDATE  Nabi - good candidate for a reverse merger transaction following a recent Phase 3 failure with NicVax. On Nov 7, 2011, the company said: “Nabi Biopharmaceuticals today announced that its Board of Directors has retained Piper Jaffray to assist with its exploration of the strategic alternatives available to the company to enhance shareholder value.”

RIGHTS IN ASIA

§ Acrux - rights outside of the U.S. are available for Estradiol MDTS® is a novel Estradiol Metered Dose Transdermal Spray (MDTS®) hormone replacement product for the treatment of moderate to severe symptoms due to menopause. This product was recently approved in Sweden and has pending approvals in a number of other countries.

Active Biotech - Successful Phase 2 study showed tasquinimod’s ability to impede disease progression in symptom-free patients with metastatic, castrate-resistant, prostate cancer. Drug works by attacking blood vessels. April, 2011 entered partnership to co-develop TASQ with Ipsen. Phase 3 trial was recently initiated and patient recruitment is ongoing. Rights are available in North America, South America and Japan. (Link)

Amylin - has purchased rights to Byetta® back from Eli Lilly. This GLP-1 inhibitor is expected to have $1 billion or more in revenues and has substantial ex-U.S. revenue. Amylin is searching for a commercialization partner outside of the United States.

Anacor - Looking for ex-U.S. partnerships for dermatology portfolio including preclinical and clinical compounds for psoriasis, tinea pedis, acne and atopic dermatitis. AN2728 is past POC stage and is in a Phase 2 trial for psoriasis and is expected to report in the first half of 2009.

Antares - Anturol: a novel and proprietary transdermal gel system for the delivery of oxybutynin which has successfully completed a pivotal Phase 3 trial for the management of overactive bladder and has been filed for NDA approval in December 2010. Licensed to Watson for marketing in the U.S. and Canada. Looking for a partner in Asia. (Link)

Antisoma - Partnering AS1413, formerly Xanafide, is a DNA intercalator in phase 3 development in secondary AML outside the U.S.

Aradigm - (AERX) inhalable insulin is available. Nine complete phase 3 studies, excellent safety and efficacy. Essentially complete preclinical, clinical, and CMC packages. Strong IP generally in the area of inhalable insulins.

Archimedes Pharma - Is seeking licensees for North America and Japan for PecFent, a nasally-delivered fentanyl product for breakthrough cancer pain, currently in Phase 3 development. Archimedes Pharma is seeking licensees outside of Europe for PecFent®. Has gained a positive opinion from the CHMP, and has been filed for regulatory approval in the US. Preparing for a U.S. launch.


BioDelivery Sciences - Has recently received approval for Onsolis in the U.S. and has a marketing partner in North America and the EU. Searching outside these regions.

Cadence Pharmaceuticals - looking for Chinese partner for their IV acetaminophen product.

Cancer Prevention Pharmaceuticals - seeking a ROW partner for its combo of efornithine and sulindac. In Phase 3 studies for familial adenomatous polyposis (FAP).
Cempra - preparing CEM-102 (Fusidic Acid or Taksta®) for Phase 3 studies that is designed to show non-inferiority to linezolid in patients with acute bacterial skin and skin structure infections. (Link)

Cosmo Pharmaceuticals - Looking to license Rifamycin SV MMX, a treatment for CDAD in Asia. Recent deal done with Santarus on Budesonide and Rifamycin for the U.S.

Cubist - recently acquired Adolor and open to partnering rights to Adolor products in Asia. Included is ADL5945 for the treatment of opioid induced constipation. This product has completed Phase 2 studies. Interested parties should contact aaron.pelta@cubist.com.

Cytokine Pharmasciences - the Cervidil/Propess vaginal insert, is a sustained-release formulation of dinoprostone, a synthetic prostaglandin E2 used when there is a medical need for cervical ripening, i.e., preparing the cervix for labor. On the market. Looking for partner in Japan, Southeast Asia, Eastern Europe and the CIS.

Endocyte - EC145 targets an alkaloid chemotherapy drug to folate receptors over-expressed on cancer cells. Met primary endpoint in Phase 2 study demonstrating 85% improvement in median progression-free survival for treatment of platinum resistant ovarian cancer. This has led to a competitive licensing process which is currently underway. Company would prefer a Japan licensing deal. Is public with a market cap around $400mm. (Link)

Epicept - Ceplene approved for AML in Europe. Active partnership process underway. Jan 11: EpiCelt announces commercial licensing agreement for Ceplene(R) with Meda in Europe and Pacific Rim. Receives $3mm upfront and royalties and milestones. U.S. rights available but company received a refusal to file on Aug 23, 2010 from FDA. (Link)


MAP Pharma - Would look at ex-U.S. partnerships for its late stage inhaled migraine drug, Levadex. NDA submitted in May 2011. In January 2011 the company entered into a promotional agreement with Allergan who will promote this product in the U.S. to headache specialists. MAP received $60 million upfront as part of the consideration for this agreement. MAP Pharma retains other physician markets in the U.S. and rights in all other geographies. (Link)

Neurogesx - Qutenza is a patch that delivers synthetic capsaicin for PHN on the market in U.S.. Recently approved. Partnered in the EU to Astellas in June 2009. Company looking for partnerships in Asia and Latin America. (Link)

Optimer - has received approval to market Dificid for CDAD in the U.S. Is looking for a commercial partner for China, Australia, South Korea and Japan.

Pacira Pharmaceuticals - Looking to partner Exparel, a long acting bupivacaine, outside of the U.S. Interested parties should contact Darren Pincus at DarrenP@pacira.com.

Pearl Therapeutics - Developing PT003, a fixed dose combination of glycopyrrolate and formoterol delivered via a pressurized hydrofluoroalkane metered dose inhaler (HFA-MDI). Good efficacy and differentiation signals in a recent Phase 2 study.

PharmaNova - Gabapentin is a proprietary formulation of gabapentin being developed for hot flashes. In Phase 3 in U.S. (Link)

QRX Pharma - When compared at equianalgesic doses with Percocet, MoxDuo IR demonstrated greater overall tolerability with substantially less side effect. Going into Phase 3. Open to regional partnership deals, particularly in China. (Link)
RaQualia - Has Japan only rights for Geodon and Eraxis. ([Link](#))

Relypsia - positive Phase 2 data achieved for a potassium binder to treat hyperkalemia which is prevalent in persons with end stage renal disease and those with congestive heart failure. Large market potential and high interest. Company recently raised $70mm to get through Phase 3 studies of this promising treatment. Open to a Japan partnership deal. ([Link](#))

Revotar - positive results on a Phase IIa study conducted to evaluate the effect of Bimosiamose on ozone-induced airway inflammation in healthy subjects with a new controlled breathing nebulizer device. Further ongoing trials for this promising clinical candidate for the treatment of COPD. ([Link](#))

Rovi - Bemiparin is currently in the market in 44 countries and in registration process in 18 additional countries. This low molecular weight heparin is for the treatment of thromboembolism. No marketing partner in Southeast Asia and Australia.

Soligenix - has partnered or Bec/BDP with Sigma-Tau in the U.S. Looking to partner in ROW. Indication is GI manifestation of acute GVHD, thereby reducing the need for systemic immunosuppressive drugs to treat GI GVHD. Company is running a confirmatory trial and indicates a partnership is most likely after results are in. ([Link](#))

Stallergenes - Stalair® line of allergy products including ones aimed at rhinitis, asthma and mites. Late stage opportunity for a large market. Both specialty and potential primary care call points. Company recently indicated that it intends to pursue U.S. commercialization on its own. Currently looking for a China partner. ([Link](#))

Transcept Pharmaceuticals - Looking for an ex U.S. partner for middle of night insomnia drug, Intermezzo. Transcept has formed a U.S. partnership with Purdue Pharma for Intermezzo.

Undisclosed player - Large pan-Asian drug company open to a sale. Update: Menarini acquires Invida Group on Nov 16, 2011. Price not announced but Invida a substantial business with more than $200mm in revenue.

Undisclosed - Chinese specialty pharmaceutical company with strength in anti-infectives. Good EBITDA and revenue over $70mm in 2011. Torreya Partners assisting in sale of majority stake. For details please contact rodolphe.grepinet@torreyapartners.com.

Ventrus - Have iferanserin for hemorrhoids with a good data package. Enrolling a Phase 3 study which will report out in Q2 2012. Company has gone public and raised over $70mm in capital to finance and obtain approval for its top two programs. Product has potential revenues in excess of $1 billion. ([Link](#))

Vernalis - Frovatriptan rights for migraine available in Asia except South Korea.

Vifor - looking for a Japan partner for Ferinject, an IV iron.

Zogenix - Sumavel, a needlefree transdermal delivery of sumatriptan for migraine. Recent FDA approval with product launch using Astellas as a co-promotion partner. Company could consider an M&A transaction. Note: Raised $30mm from Cowen Healthcare Royalty Partners in July 2011.

ZS Pharma - Drug for treatment of hepatic encephalopathy. Large Asian market due to prevalence of liver failure.

**RIGHTS IN CANADA**

Chelsea Therapeutics - In late stage development of Droxidropa for the treatment of orthostatic hypotension. In active talks to partner the drug in hypotension. Large potential in the Parkinson’s market - also could work in fibromyalgia. On market already through Dainippon Pharma in four Asian countries. Company recently reported that it has potential to file for an NDA based on studies that have already been completed.
Dong-A Pharmaceuticals - Looking to Canadian rights to a U.S. Phase 3 PDE V inhibitor that is on the market in Korea. Licensed in the U.S. to Warner-Chilcott. (Link)

Dyax - Looking to partner DX-88 in EU, for hereditary angioedema. BLA filed with a priority review.

MAP Pharma - Would look at ex-U.S. partnerships for its late stage inhaled migraine drug, Levadex. NDA submitted in May 2011. In January 2011 the company entered into a promotional agreement with Allergan who will promote this product in the U.S. to headache specialists. MAP received $60 million upfront as part of the consideration for this agreement. MAP Pharma retains other physician markets in the U.S. and rights in all other geographies. (Link)

Pacira Pharmaceuticals - Looking to partner Exprarel, a long acting bupivacaine, outside of the U.S. Interested parties should contact Darren Pincus at DarrenP@pacira.com.

Rovi - Bemiparin is currently in the market in 44 countries and in registration process in 18 additional countries. This low molecular weight heparain is for the treatment of thromboembolism. No Canada marketing partner.

RIGHTS IN THE EU

$ Acrux - rights outside of the U.S. are available for Estradiol MDTS® is a novel Estradiol Metered Dose Transdermal Spray (MDTS®) hormone replacement product for the treatment of moderate to severe symptoms due to menopause. This product was recently approved in Sweden and has pending approvals in a number of other countries.

Advanced Life Sciences - Looking to partner Restanza, cethromycin, a late stage compound for treatment of community acquired infection. Approvable letter with FDA requesting an additional clinical study. Partnered in Asia with Wyeth. (Link)

Alkermes - ALKS-33, a unique opioid receptor profile with strong efficacy data demonstrating rapid onset and extended activity beyond 24 hours. Broad applicability including treatment for reward/impulse control disorders. Multiple clinical studies conducted including Phase 2 for alcohol dependence. Interest in partners for rights outside of North America.

Almirall - Looking to partner LAS100977, once daily long acting beta agonist. Recently shown positive data in a Phase 2 study for asthma and COPD. Partnered in U.S. to Forest. (Link) EU rights available.

Amylin - has purchased rights to Byetta® back from Eli Lilly. This GLP-1 inhibitor is expected to have $1 billion or more in revenues and has substantial ex-U.S. revenue. Amylin is searching for a commercialization partner outside of the United States.

Anacor - Looking for ex-U.S. partnerships for dermatology portfolio including preclinical and clinical compounds for psoriasis, tinea pedis, acne and atopic dermatitis. AN2728 is past POC stage and is in a Phase 2 trial for psoriasis and is expected to report in the first half of 2009. Based on these results, Anacor expects to initiate a Phase 2b dose-ranging trial for AN2728 in mid-2010.

Antisoma - Partnering AS1413, formerly Xanafide, is a DNA intercalator in phase 3 development in secondary AML outside the U.S.

Apotex - Willing to outlicense many of its generic products for the EU market. (Link)

Aradigm - Inhalable insulin is available. Nine complete phase 3 studies, excellent safety and efficacy. Essentially complete preclinical, clinical, and CMC packages. Strong IP generally in the area of inhalable insulins.
Ardana - Markets urology products in Europe. Currently in administration. Products include Emselex for OAB and Striant (testosterone). Pipeline of urology products. (Link)

Bellus Health - Would consider partnering US rights to Vivimind for Alzheimers. Active partnering discussions ongoing in Europe. In April, 2011 announced that it has signed an exclusive license and distribution agreement with Agahan Ayandeye Pars Inc. for this product in the MidEast.

Biocryst - In Phase 2 with Forodesine for CTCL. Data expected in Q4 2010. Trial underway in CLL. Partnered with Mundipharma for Europe, Asia, Australia and certain neighboring countries.

Cancer Prevention Pharmaceuticals - seeking a ROW partner for its combo of eflornithine and sulindac. In Phase 3 studies for familial adenomatous polyposis (FAP).

Chelsea Therapeutics - In late stage development of Droxidropa for the treatment of orthostatic hypotension. In active talks to partner the drug in EU. Large potential in the Parkinson’s market. But has seen some poor data outcomes in a recent a Phase 3 - on Dec 15, 2009 Chelsea received FDA approval to change the primary endpoint in the trial and expand enrollment. On market already through Dainippon Pharma in four Asian countries.

Clinuvel - In Phase 3 for European approval for Afamelanotide, a photoprotectant to be used in Erythropoietic Protoporphyria. (Link)

Cosmo Pharmaceuticals - Looking to license Rifamycin SV MMX, a treatment for CDAD in Asia. Recent deal done with Santarus on Budesonide and Rifamycin for the U.S.

Cytokine Pharmasciences - the Cervidil/Propess vaginal insert, is a sustained-release formulation of dinoprostone, a synthetic prostaglandin E2 used when there is a medical need for cervical ripening, i.e., preparing the cervix for labor. On the market. Looking for partner in Japan, Southeast Asia, Eastern Europe and the CIS.

Dyax - Looking to partner DX-88, for hereditary angioedema. Recently approved. No known sale process underway but company is appears to be an attractive takeover target.

Epicept - Ceplene approved for AML in Europe. Active partnership process underway. Under the terms of the agreement, EpiCept will grant Meda the right to market Ceplene in Europe and several other countries including Japan, China, and Australia. (Link)

Gentium - Defibrotide for the treatment of severe Hepatic Veno-Occlusive Disease (VOD) have indicated both efficacy and lack of significant toxicity. Rights outside of the U.S. are available. IDS partner for EU

Intermune - Filed an NDA for Pirfenidone for IPF in Q4. FDA failed to approve product. Additional trial likely required.

Ipsen - completed a strategic review in 2011 with the theme of increasing focus and growing the footprint. The implications of this for potential partnerships or asset divestitures are threefold: (1) Ipsen looking for a partner in the French primary care arena, (2) Ipsen looking to find a buyer for its industrial site in Dreux France which makes solid dose and liquid formulations and (3) “Ipsen will explore all options to maximize value (of its short stature franchise) while meeting its obligations to patients and partners. It will be managed directly by regions and countries.”

MAP Pharma - Would look at ex-U.S. partnerships for its late stage inhaled migraine drug, Levadex. NDA submitted in May 2011. In January 2011 the company entered into a promotional agreement with Allergan who will promote this product in the U.S. to headache specialists. MAP received $60 million upfront as part of the consideration for this agreement. MAP Pharma retains other physician markets in the U.S. and rights in all other geographies. (Link)
Mayne Pharma - Lozanoc™ (SUBA®-itraconazole) is an improved patent protected formulation of itraconazole to treat fungal infections. The bioavailability of SUBA®-itraconazole is twice that of the originator product (Sporanox®) and shows reduced intra- and inter-subject variation. A Marketing Authorisation Application (MAA) in the EU has been submitted (November 2010) and discussions with the FDA are underway regarding further requirements for 505(b)2 filing and US registration. Interested parties should contact andrew.dunbar@maynepharma.com.

Optimer - Promising Phase 3 data for Prulifloxacin in infectious diarrhea. Favorable comparison versus ViroPharma’s vancomycin. Open to a partnership transaction for this drug following the recent approval of Dificid (fidaxomicin) by the FDA.

Pacira Pharmaceuticals - Looking to partner Exprarel, a long acting bupivacaine, outside of the U.S. Interested parties should contact Darren Pincus at DarrenP@pacira.com.

PharmaNova - Gabapentin is a proprietary formulation of gabapentin being developed for hot flashes. In Phase 3 in U.S. (Link)

Salix - looking for a European partner for RELISTOR, a subcutaneous treatment for opioid-induced constipation. This was recently partnered in Asia to Link Healthcare.

Santhera - looking to outlicense rights in Europe and Asia to JP-1730/fipemazole for Parkinson’s diskinesia after licensing product in North America to Biovail in Aug 2009 and currently in phase 2 studies. (Link)

Soligenix - has partnered orBec/BDP with Sigma-Tau in the U.S. Looking to partner in ROW. Indication is GI manifestation of acute GVHD, thereby reducing the need for systemic immunosuppressive drugs to treat GI GVHD. (Link)

Transcept Pharmaceuticals - Looking for an ex U.S. partner for middle of night insomnia drug, Intermezzo. Transcept has formed a U.S. partnership with Purdue Pharma for Intermezzo.

Veroscience - Global rights to Cycloset that improves HBA1C and CV health through a CNS mechanism. Approved by the FDA and launched in the U.S. by Santarus. Europe deal is in the works.

Vivus - Looking to partner Qnexa in Europe and other ROW territories. An approval is possible in the EMA with long-term market exclusivity in mid-2012 (or sooner).

Zogenix - Sumavel, a needlefree transdermal delivery of sumatriptan for migraine. Recent FDA approval with product launch using Astellas as a co-promotion partner. Company could consider an M&A transaction. Note: Raised $30mm from Cowen Healthcare Royalty Partners in July 2011.

Active Biotech - Successful Phase 2 study showed tasquinimod’s ability to impede disease progression in symptom-free patients with metastatic, castrate-resistant, prostate cancer. Drug works by attacking blood vessels. April, 2011 entered partnership to co-develop TASQ with Ipsen. Phase 3 trial was recently initiated and patient recruitment is ongoing. Rights are available in North America, South America and Japan. (Link)

Amylin - has purchased rights to Byetta® back from Eli Lilly. This GLP-1 inhibitor is expected to have $1 billion or more in revenues and has substantial ex-U.S. revenue. Amylin is searching for a commercialization partner outside of the United States.

Apricus Bio - has filed for market authorization to sell its erectile dysfunction drug, Vitaros®, in Latin America. Open to a commercial partnership deal.

BioDelivery Sciences - Has recently received approval for Onsolis in the U.S. and has a marketing partner in North America and the EU. Searching outside these regions.

Biocryst - In Phase 2 with Forodesine for CTCL. Data expected in Q4 2010. Trial underway in CLL. Partnered with Mundipharma for Europe, Asia, Australia and certain neighboring countries.

Cadence Pharmaceuticals - looking for Latin American partner for their IV acetaminophen product - OFIRMEV.

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PharmaNova - Gabapentin is a proprietary formulation of gabapentin being developed for hot flashes. In Phase 3 in U.S. (Link)

ProStrakan - looking for a Latin America partner for Sancuso which is launched globally. (Link)

Santhera - Looking to outlicense rights in Europe and Asia to JP-1730/fipemazole for Parkinson’s diskinesia after licensing product in North America to Biovail in Aug 2009 and currently in phase 2 studies. Company reported revenues of 23mm CHF for 2009. (Link)

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Transcept Pharmaceuticals - Looking for an ex U.S. partner for middle of night insomnia drug, Intermezzo. Transcept has formed a U.S. partnership with Purdue Pharma for Intermezzo. (Link)
Vernalis - **Frovatriptan** rights for migraine available in Asia except South Korea. ([Link](#))

**RIGHTS IN MIDDLE EAST / AFRICA**

**NEW** Aeterna Zentaris - looking for MidEast partner for Perifosine, a Phase 2 oncology agent.

**NEW** Amylin - has purchased rights to Byetta® back from Eli Lilly. This GLP-1 inhibitor is expected to have $1 billion or more in revenues and has substantial ex-U.S. revenue. Amylin is searching for a commercialization partner outside of the United States.


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**UPDATE** Transcept Pharmaceuticals - Looking for an ex U.S. partner for middle of night insomnia drug, Intermezzo. Transcept has formed a U.S. partnership with Purdue Pharma for **Intermezzo**.

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Zogenix - **Sumavel**, a needlefree transdermal delivery of sumatriptan for migraine. Recent FDA approval with product launch using Astellas as a co-promotion partner. Company could consider an M&A transaction. Note: Raised $30mm from Cowen Healthcare Royalty Partners in July 2011.

**ROYALTIES**

Avanir - Would sell Abreva royalties. Docosanol 10% cream is marketed in North America under the band name Abreva by our marketing partner, GlaxoSmithKline.

Entremed - Has announced that will sell a royalty on Thalomid. ([Link](#))

Enzon - may be open to monetizing remaining PEG-INTRON royalties. Revenues have been declining.

Mountain View Pharmaceuticals - Would consider sale of royalties on Savient’s Puricase.
COMPLETED  Titan - sold Fanapt royalty interest to Deerfield for $15mm on November 15, 2011.

NEW Undisclosed - Torreya Partners is handling a sale of royalties on three marketed products. Interested parties should contact Biliana.rajevic@torreyapartners.com.

SMOKING CESSATION / SAFE CIGARETTES

22nd Century Limited - developing a very low nicotine cigarette. Showed substantially higher quit rates in a Phase 2 trial than nicotine lozenges. The Company is conducting a Phase II-B trial in 2011 and plans to conduct two larger and concurrent Phase 3 trials in 2012. The FDA-approval process for its X-22 smoking cessation aid is expected to be completed by 22nd Century and upon such approval launch X-22 in the U.S. market in early 2013 (as a prescription), and in other top smoking cessation markets thereafter. (Link)

Acrux - developing a transdermal nicotine replacement therapy.

Aradigm - (ARD-1600) in phase 1 inhaled nicotine program. Product replicates PK of a cigarette and faces positive prospects as either an OTC product or an Rx product.

Beech Tree Labs - in Phase 1 for a centrally acting drug candidate that reduces cravings associated with nicotine and other addictive substances. (Link)

Cary Pharma - Looking to carry out a Phase 2 trial of QuitPak® for smoking cessation. Open to a partnership deal. (Link)

Cypress Bio - Cypress was recently purchased by Ramius and Royalty Pharma. The key value was in the company’s Savella® royalty. However, Cypress has the rights to Stacatto® Nicotine which could be repartnered. Planning a Phase 1 trial in late 2011. (Link)

Embera NeuroTherapeutics is developing EMB-001 which is designed to reduce craving for addictive substances. The product is a combination of oxazepam and metyrapone. In Phase 1 studies. Shown to be more effective in reducing craving than Chantix® in animal studies.

Ploom - Technology that heats tobacco but does not burn it. Delivers flavor in vapor but not nicotine and other particulates associated with burning of tobacco. (Link)

SPECIALTY PHARMA - MARKETED PRODUCTS

UPDATE Actelion - has received takeover approaches from several strategic bidders according to the Wall Street Journal (10/7/2010). Activist shareholder in Elliott pushed for a change of control transaction. Wall Street Journal Sep 28, 2011: “Elliott Advisors Cuts Actelion Stake in Wake of Control Battle”. Elliott failed to put its own directors on Board and JP Garnier, formerly CEO of GSK, recently became Chairman. A takeover of Actelion appears to be quite unlikely in light of these events.

UPDATE $ AMAG - Feraheme IV iron product - Recently approved. Company is commercializing on its own. AMAG’s recent merger attempt with Allos was ended in November 2011. On Nov 17, 2011, AMAG announced that it had hired Jefferies to explore all opportunities to enhance shareholder value. Frank Thomas, interim CEO of AMAG indicated: “We will expeditiously complete this process, which will include a parallel review of a potential sale of the company and other strategic merger and acquisition transactions.”

$ Amoun Pharmaceutical - An Egyptian company that manufactures off-patent branded generic formulations. It is one of the largest pharmaceutical companies in Egypt. It sells over 135 human products in over 275 forms. Of these products, 33 occupy the top 2 positions in their respective therapeutic categories and subcategories. Open to a company sale or strategic stake purchase. Reuters - Dec 6, 2010: “CVCI is also preparing to sell Amoun, one of Page | 117
Egypt’s biggest drugmakers, people familiar with the matter told Reuters on Oct. 20. It owns Amoun with two other co-investors.” Bloomberg reported in Feb 2011 that the company has been looking for $1 billion in a sale price but that political upheaval in Egypt has hindered the sale.

**UPDATE** $ Avanir - Launched **Neudexta** for the treatment of pseudobulbar effect and, potentially, other indications. Positive data and good patent picture. Widely rumored to be an M&A candidate. $5.7 million in revenue in first year of launch (soft numbers). Market cap of $248 million as of November 2011. EMA application recently accepted.

**COMPLETED** $ Azur Pharma has hired Lazard to advise on funding options including a potential stake sale according to the *Sunday Times* on May 22, 2011. Company has a solid franchise as a marketer of drugs in the CNS and women’s health areas. A company sale could be possible. Update: Sep 19, 2011 - Jazz Pharma merges with Azur Pharma as an Ireland domiciled company with former Jazz shareholders taking 80% of the combined company. A transaction closing is expected in Q1 2012.

$ Biofarma - Biofarma for sale via JP Morgan. Reuters (12/6/2010): Citigroup's (C.N) venture capital arm and two co-investors have begun an auction of Turkish copycat drugmaker Biofarma, three people familiar with the matter said, in what could be Turkey's biggest healthcare deal.” Update: A number of parties rumored to have looked at this asset but price ask was seen as prohibitive.

**NEW** $ Canyon Pharmaceuticals - Canyon Pharmaceuticals is seeking to build a strategic alliance preferentially on a worldwide basis to commercialize Desirudin (Iprivask® US-registration / Revasc® EU-registration), a differentiated anticoagulant drug which is approved by the FDA, the EMA and several of the rest of world authorities. Desirudin is a direct thrombin inhibitor and the only subcutaneous direct thrombin inhibitor (DTI) with approval for venous thromboembolism (VTE) prophylaxis following hip- and knee-replacement surgery.

$ CNS Therapeutics - has introduced Gablofen, an AP rated intrathecal version of baclofen for control of severe spasticity among patients with movement disorders. This product has significant advantages over the existing marketed product and is likely to have significant revenue traction over the next several years. ([Link](#))

**UPDATE** $ Covidien Pharmaceuticals - According to the *New York Times* on June 7, 2011 “Covidien, the health care company spun out from Tyco four years ago, may seek to sell its pharmaceutical unit…” This division of Covidien (formerly Mallinckrodt) has a major business selling pain products (both branded and generics) and imaging products. Revenues are around $2 billion. Update: As of December 2011 no sale has taken place. Company is rumored to be interested in a sale of the whole business (rather than pieces) for a full price. YE 2011 numbers reported on Nov 15, 2011 and were robust (sales up 9% yoy) with strong performance in generics.

Dusa Pharma - Main tool is PDT coupled with derm drugs. Revenues around $30mm. ([Link](#))

**COMPLETED** Graceway - Could consider sale of products from 3M and has hired Lazard to explore alternatives through an ongoing process. Aldara for acitinic keratosis a key seller but was recently genericized. Update: Nov 23, 2011 - Medicis acquired Graceway for $455mm after the company filed for Chapter 11 bankruptcy on Sep 29, 2011.

**COMPLETED** Inova Pharmaceuticals - Asian OTC and Pharma product company with revenues > $500mm. Ran a sale process via Greenhill Caliburn. No transaction has taken place as of June 2011. Nov 21, 2011: Valeant buys iNova for $625 million.

$ Lipose - Viafill fat transfer system on the market with applications in aesthetics where traditional volumizers are not well suited - particularly for the face and breasts. Company assisted by Torreya Partners. For details contact john.brady@torreypartners.com.
$ Pacira Pharmaceuticals - Looking to partner Exprarel, a long acting bipuvicaine, outside of the U.S. Interested parties should contact Darren Pincus at DarrenP@pacira.com.

NEW $ Rottapharm - for sale according to the Wall Street Journal. Company has two Phase 3 drugs in development and a strong group of branded products in the market. Revenues over $850 million. Sale price could be over $2.5 billion. Company rumored to be using Credit Suisse to find a buyer.

NEW $ San Raffaele del Monte Tabor - privately-held Italian pharmaceutical company, is soliciting offers other than the EUR 350m binding offer from Vatican bank IOR and Italian entrepreneur Vittoria Malcalza, according to Il Sole 24 on Dec 2, 2011.

UPDATE $ Savient Pharmaceuticals - FDA approved KRISTEXXA (pegloticase) in Sep 2010, a PEGylated uric acid specific enzyme indicated for the treatment of chronic gout in adult patients refractory to conventional therapy. Company is seeking a commercial buyer and is using JP Morgan and Lazard in its search for an acquisition partner. Savient is now pursuing a launch of Krystexxa on its own and is building a 50-person plus sales force. Update: First year sales were $2.6 million. Market Cap of $160mm. (Link)

UPDATE Sigma-Tau - Reuters (6/2/11): “Italy’s Sigma-Tau is eyeing the sale of up to 49 percent in the family-owned drugmaker to private equity, ahead of a possible IPO that could value it at more than $2 billion, people familiar with the situation said.” Company has approximately €1bn revenue with a strong rare disease business and a well established European brand business. It is believed that discussions regarding a stake sale are no longer active but rather the company is focused on restructuring its Italian business.

$ Suneva Medical - Marketing Artefill, a long-acting dermal filler with impressive revenue growth. Open to a partnership or even a company sale. (Link)

$ Undisclosed player - selling off $20mm revenue+ commercial product for narrow market with pediatric applications.

$ Undisclosed player - selling off portfolio of $50mm area specialty pharma products with some pediatric products included.

$ Undisclosed player - selling a $10mm marketed primary care cardiovascular product.

$ Undisclosed player - approved hospital anesthetic in the United States with differentiation from existing products. Also could be used in physician office setting where sedation required. Open to a product sale or other value creating arrangement. Global rights available.

Undisclosed player - open to a merger or sale of $35mm revenue company with commercial presence in the U.S. pain market. Torreya Partners advising.

NEW Undisclosed - German vertically integrated marketer of generic and branded pharma products with strength in cardiovascular, dental and veterinary medicines. Revenues of this company exceed €100mm.

Undisclosed player - dermatology company with more than $40mm in revenue has hired a financial advisor to restructure its debt that likely exceeds intrinsic value of assets. Process has been underway for a month or two.

COMPLETED Undisclosed player - Large pan-Asian drug company open to a sale. Update: Menarini acquires Invida Group on Nov 16, 2011. Price not announced but Invida a substantial business with more than $200mm in revenue.

NEW $ Undisclosed player - availability of product with pysch and primary call point. $12mm product sales run rate.
$ Undisclosed - Pharma company with a product for heart failure and revenues over $20mm would consider a sale.

Undisclosed - U.S. rights to a marketed drug for depression are available.

Zogenix - Needlefree transdermal delivery of sumatriptan for migraine. Has 80 sales reps. Recent FDA approval with upcoming product launch using Astellas as a co-promotion partner. Update: company filed for an IPO in Sep 2010 - had $7mm in revenues in first half of 2010 with a substantial operating loss.

**STEM CELLS, RNAI AND CELL THERAPY**

Aldagen - ALD-401 is a type of adult stem cells called aldehyde dehydrogenase-bright (ALDHbr) stem cells isolated from cord blood. ALD-401 is being developed for the post acute treatment of ischemic stroke and is in a Phase 2 study.

Calando Pharmaceuticals - Has a promising nanotechnology approach for delivery of RNAi. Looking for a company sale. (Link)

Cardio3 - Developing a stem cell transplant method to address CHF after MI using cardioipoetic cells. (Link) Cardio3 BioSciences SA signs a co-development agreement with Artelis SA for the industrialization of the manufacturing process of C-Cure and inaugurates its new premises in Mont-Saint-Guibert. (Link)

Cellerant - Developing a novel, cell-based medicine (Myeloid Progenitors / CLT-008) as a treatment for chemotherapy- and radiation-induced neutropenia as well as for Acute Radiation Syndrome. Update: Sep 1, 2010: received a substantial BARDA grant. On March 22, 2011, Cellerant Therapeutics initiates a Phase I/II clinical trial of CLT-008 for Chemotherapy induced neutropenia in acute Leukemia patients.

Geron - has ceased development of its embryonic stem cell development program and is open to partnering this program to a third party.

HAC Biomed - a cell therapy company has very promising data for a treatment for the repair of damaged liver tissue. Commercial stage in Germany. Assisted by Torreya Partners. Interested parties should contact tom.bird@torreyapartners.com.

Innovacell - Positive Phase IIb data for ICES13, a personalised cell therapy for SUI. The primary endpoint met on the trial was a reduction in incontinence episode frequency across 32 centres in four EU countries. (Link)

Ipierian - Working on reprogramming of pluripotent stem cells for various therapeutic applications. (Link)

Kiadis Pharma - Reviroc is being developed as a treatment that eliminates blood cancer cells from autologous transplants for patients with end stage blood cancer. Granted orphan by FDA which is in Phase 3. (Link)

MaxCyte - transfection cell platform with ability to program cells to attack a variety of major diseases.

Medi-Post - CARTISTEM® has been developed to treat damaged articular cartilage on knee as a result of acute traumatic injury or more chronic conditions such as osteoarthritis. Phase 3 clinical trial has shown efficacy in cartilage regeneration. KFDA approval pending. U.S. IND filing in process. (Link)

Oxford Biomedica - In a Phase I/II trial of ProSavin for the treatment of Parkinson's disease (PD). This gene therapy has been associated with improvements in patient symptoms. (Link)

Pervasis - Developing Vascugel, a cell therapy product, to accelerate vein remodeling for patients receiving an AV fistula (AVF) in end stage renal disease. Compare to Proteon Therapeutics which has optioned a product for the same indication to Novartis and is in phase 2 studies.
Quintessence Biosciences - RNA degrading Ribonucleases being developed for oncology applications.

NEW Santaris Pharma - Phase 2a data of miravirsen, a microRNA-targeted drug, shows dose-dependent, prolonged viral reduction of 2-3 logs HCV RNA after four-week treatment in Hepatitis C patients. (Link)

Silence Therapeutics - Disclosed on Sep 6th 2010 that it had received an approach that could lead to an offer. Company is a leader in RNAi delivery and associated therapeutics. Silence has retained a financial advisor and is pursuing its duties as a UK listed company to maximize shareholder value. Dec 21, 2010: “Further to the announcement dated 6th September 2010, Silence confirms that it remains in an offer period. The Company continues to explore a variety of strategic opportunities.” Feb 7, 2011: The Board of Silence received a number of indicative proposals but it is the view of the Board that none of these were sufficiently compelling to pursue further in the context of the continued success of the Company. The Board has therefore terminated these discussions to allow management to focus all of its efforts on the ongoing business for the purpose of creating long-term shareholder value.”

Stemcells - HuCNS-SC is well-characterized, normal human CNS stem cells (HuCNS-SC) from brain tissue, isolated and purified using monoclonal antibodies against cell surface antigens. HuCNS-SC is being developed as intracerebral injection for the treatment of myelin disorders such as Pelizaeus-Merzbacher Disease. Phase 1 data upcoming in 2012. (Link)

Sylentis - focused on topical RNAi therapy with a Phase 1 trial of a therapy for glaucoma and dry eye.

Tengion - Leading regenerative medicine company open to partnership deals for the development of both an artificial bladder and an artificial kidney. Tengion has recently gone through a leadership transition and plans an FDA meeting to discuss the kidney program before the end of 2011. (Link)

UROLOGY AND MEN’S HEALTH

Afferent Pharmaceuticals - Developing P2X3 receptor antagonist for OAB. Supportive preclinical data. (Link)

Ampio - Zertane is a 5-Hydroxytryptamine Inhibitor (5-HT) and mu-opioid receptor agonist. Zertane is being developed as fast dissolving oral tablets for the treatment of premature ejaculation in men. Very strong Phase 3 data reported in a recent trial in the prevention of premature ejaculation. (Link)

NEW Apricus Bio - has filed for market authorization to sell its erectile dysfunction drug, Vitaros®, in Latin America. Open to a commercial partnership deal.

Aptys - looking to outlicense transdermal surfactant-free testosterone gel. Phase 3 ready.

Camurus - Prosenze® Depot (CAM2032) is a ready-to-use LHRH agonist depot designed for easy and painless subcutaneous administration being developed for treatment of prostate cancer and endometriosis. The product has shown positive Phase 2a data.

Celek Pharmaceuticals - CEL-031, is a Phase 2 drug in development for the treatment of non-muscle invasive bladder cancer. Works by inducing tumor cell apoptosis and inhibiting cell proliferation. (Link)

Clarus Therapeutics - OriTex, a proprietary oral testosterone product being developed in Phase 2 for use in men with low testosterone levels.

Conjugon - (C-1205) in Phase 1b studies for e. coli donor technology to prevent UTI’s in men with a urinary catheter. (Link)
GP Pharm - developing long-acting injectibles in the oncology area. Looking for licensors for Leuprorelin 1 month, Leuprorelin 3 months, Triptorelin 1 month, Triptorelin 3 months, Gosorelin 3 months, Octreotide LAR and Octretide MAR. Also has developed desmopressin drops.

NEW Innovacell - Positive Phase IIb data for ICES13, a personalised cell therapy for SUI. The primary endpoint met on the trial was a reduction in incontinence episode frequency across 32 centres in four EU countries.

Intelgenx - INT007 found to be bioequivalent to a leading branded tablet containing a phosphodiesterase type 5 (PDE-5) inhibitor for the treatment of erectile dysfunction. INT007 has been developed using IntelGenx' proprietary immediate release "VersaFilm" drug delivery technology. Market ready in 2012 as a 505(b)2. (Link)

Japan Tobacco - TRPV1 antagonist in Phase 1 development. Rights available. (Link)

King’s College - Reversible, non-hormonal, oral delivery approach to male contraception. Preclinical. (Link)

Merlinon - Developing finafloxacin, a best in class 4th generation fluoroquinolone being targeted against severe, life-threatening infections. Compound has successfully progressed through to mid-stage clinical development. Oral formulation demonstrated in PoC studies compelling efficacy in uncomplicated UTI and the eradication of Helicobacter pylori. IV formulation currently completing Phase 1 trials and Phase 2 studies in complicated UTI are planned for late 2011, as are clinical protocols in complicated respiratory tract infections. MerLion are exploring strategic alternatives for this product with the assistance of Torreya Partners. For further details, contact Rodolphe.grepinet@torreyapartners.com. (Link)

MerLion Pharma - Acyline is an oral GnRH antagonist for treatment of prostate cancer. Today’s products are injectible. (Link)

Novadel - Developing Duromist (a lingual mist version of sildenafil) for introduction to the market after the Viagra® patent expiration in 2012. Can complete pivotal 505b(2) trial in 2011. Recently filed an IND to start studies.

UPDATE OxThera - Oxazyme is recombinant oxalate degrading enzyme for the treatment of kidney stones. No data reported from a pending study in some time. A related compound is at Althea Technologies. (Link)

Palatin Technologies - Bremelanotide is a melanocortin agonist that has shown positive results in four Phase 2 efficacy for erectile dysfunction studies enrolling more than 1,300 men. Was partnered with King and after a formulation change is intended for further Phase 2/3 studies in the next several years. Also showed positive results in a Phase 2a pilot study for female sexual dysfunction (FSD). Company announced commencement of enrollment in a Phase 2b study for FSD on June 28, 2011. (Link)

Pierre Fabre - Outlicensing North American rights to Javlor (vinflunine) - a newly approved bi-fluorinated MTI (Microtubule inhibitor) for bladder cancer. Licensing process is making substantial progress. (Link)

Protox Therapeutics - PRX302 has completed a promising open-label Phase 2a study in BPH. Topline data pending on Phase 2b study in Q1 2010 and were quite positive. Warburg Pincus recently made a $35 million investment which will facilitate registrational trials for this drug. Rights to this drug in Japan were licensed to Kissei. (Link)

Quatrx - Fispemifene similar to GTX. Would partner this drug. (Link) Fispemifene has completed two Phase I clinical studies in Europe and one Phase 2 clinical study in the US.

Stellar Pharma - has retained U.S. rights to Uracyst® from Watson. This is an investigational drug/device combination for the treatment of interstitial cystitis. Watson indicated that the product did not meet its endpoint in a double-blinded placebo controlled study. There may be an opportunity to redefine the patient population in a further study with this drug and still achieve approval in the U.S. Note: On June 8, 2011, Stellar announced that it had retained an advisor for its U.S. market products.
UPDATE Taris Biomedic - Has recently completed a Phase 1 study showing the ability of an intravesical delivery system to get drug to the bladder for the treatment of interstitial cystitis. Raised $18mm in April 2011. Recently started enrollment of a Phase 2 trial. (Link)

Telormedix - Developing a promising TLR9 modulator that is in a Phase 1 / 2 trial for the treatment of bladder cancer. (Link)

Tengion - Leading regenerative medicine company open to partnership deals for the development of both an artificial bladder and an artificial kidney. Tengion has recently gone through a leadership transition and plans an FDA meeting to discuss the kidney program before the end of 2011. (Link)

UPDATE Theravida - Combination of oxybutynin and an agonist to improve tolerability and efficacy of oxybutynin for treatment of overactive bladder (OAB). Will report out Phase 2b data in early 2012.

Toray Industries - TRK-130 provides new mechanism of action which relates to CNS, and controls lower urinary tract function. Indicated for OAB. Phase Ila study has been completed and efficacy has been confirmed.

$ Undisclosed - mature, off-patent urology product.

Undisclosed - Pharma Company exploring sale of certain early clinical compounds in the urogenital area.

Urigen - In Phase 2 with URG101 for the treatment of acute flares of Interstitial Cystitis (IC/BPS). (Link)

UPDATE Vantia - Positive Phase 2a data with VA106483, a vasopressin agonist, for treatment of nocturia, excessive trips to urinate at night. Likely to be effective based on mechanism. VA106483 is currently being investigated as a new treatment for nocturia in a 30 patient trial to find the dose in older men with BPH. Data from this trial are expected shortly. Recently raised $6mm. (Link)

UPDATE Vivus - Would be interested in partnering avanafil, a PDE V inhibitor in development for erectile dysfunction. Recently reported out second Phase 3 program also with strong data. Vivus submitted an NDA for this drug on June 30, 2011 and has a PDUFA date in the U.S. of April 29, 2012. Cowen predicts this drug will take 8% market share with $800mm in U.S. revenue. (Link)

VACCINES

Agenus - Adjuvant QS-21 has consistently stimulated strong cell-mediated and humoral immune responses when combined with a variety of vaccine antigens. Approximately 15 product candidates utilizing QS-21 are currently in clinical development by Agenus’ commercial licensees and collaborators.

Archivel Farma S.L - running a double-blind, randomized, placebo-controlled phase 2 clinical trial to investigate the safety, tolerability, and immunogenicity of the novel antituberculous vaccine RUTI following one month of isoniazid treatment in subjects with latent tuberculosis infection.

BioDiem - Working on a cell-based influenza vaccine. In Phase 2 studies. Open to a global partnership deal. Also working on an intranasal Live Attenuated Influenza Vaccine (LAIV). The LAIV is now on market in India and has been licensed for other emerging markets to Merck/WHO. (Link)

BTG - Angiotensin Therapeutic Vaccine (ATV) for high blood pressure. This therapeutic vaccine (biologic) is in early Phase 2 clinical development. Large potential market as alternative approach to blood pressure management. (Link)

BTG - CoVaccine HT. This is a proprietary vaccine adjuvant platform that generates very powerful antibody responses. It has been used in a number of studies and diseases by groups around the world with impressive performance data available.

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CureVac - upregulates mRNA to create specific autoantigen responses to disease. Has recently shown a nice proof of principle in man for a therapeutic vaccine aimed at prostate cancer in a Phase 1b study.

**UPDATE** Cytos - looking to partner CYT003 for allergic rhinoconjunctivitis. Vaccine has finished Phase 2b studies. Asthma symptoms decreased by 33% under QbG10 treatment despite corticosteroid withdrawal, while they increased by 29% under placebo treatment (p=0.01). Use of relief medication doubled in the placebo group, while it remained stable in the QbG10 group (p=0.01). Update: Company has been exploring strategic options with aid of a financial advisor. Recent attempt to restructure bonds has not succeeded. ([Link](#))

Cytos - In preclinical development with Qb-Flu. This is a bacterially produced subunit vaccine composed of the globular domain of the Influenza A hemagglutinin surface protein conjugated to Cytos’ virus-like particle Qb. Has shown strong antibody titres achieved with this vaccine. What is important is that this approach avoids the manufacturing issues associated with both cell culture and egg-based flu vaccines. ([Link](#))

**UPDATE** Dynavax - HEPLISAV is an investigational adult hepatitis B vaccine that was formerly partnered with Merck. In two Phase 3 trials, HEPLISAV demonstrated increased, rapid protection with fewer doses than current licensed vaccines. Positive data reported on July 20, 2011 and regulatory approval pending. ([Link](#))

GlycoVaxyn - Strong Phase 1 data for a novel vaccine for Shigella. Open to partnering. ([Link](#))

Inovio - Looking for partnerships based upon its Syncon vaccine platform. Syncon facilitates better vaccines that address changing strains of diseases, including HIV, HCV, HPV, and influenza. Planning to complete a Phase 1 for a universal flu vaccine in 2011. Has shown positive results in recent HIV vaccine Phase 1 study. Starting a Phase 2 study in 2011 in cervical cancer. ([Link](#)) ([noncon](#))

Intercell - rumored takeover candidate. Strong Japanese encephalitis vaccine marketed by Novartis and CSL.

**NEW** Inviragen - DENVax, a promising clinical development candidate for dengue fever and other tropical diseases. Phase 2 data coming up for this candidate which has a substantial commercial market. ([Link](#))

JN International Medical - NmVac4-A/C/Y/W-135 is a lyophilized preparation of purified polysaccharides from Neisseria meningitidis (meningococcus) of groups A, C, W135 and Y. Highly effective in a recent Phase 3 trial. ([Link](#))

**COMPLETED** Juvaris - JVRS-100 is a highly potent toll-like receptor-directed cationic lipid-DNA complex that is being developed as a therapeutic and an adjuvant to treat multiple diseases including influenza. In Phase 2 for vaccine adjuvant for influenza in elderly. Note: In September 2011, this asset was sold to Colby Pharmaceutical Company.

**UPDATE** LigoCyte - has a Phase 2 vaccine is designed to treat norovirus, the leading worldwide cause of infectious gastroenteritis, or inflammation of the stomach and intestines. Positive Phase 1b data. The company is exploring strategic alternatives with assistance from Montgomery Marshall (now Sagent). As of Dec 2011, no transaction had taken place.

Okairos - Hepatitis C vaccine in development has shown T-cell response in Phase 1. ([Link](#)) A second Phase I study is going to be started soon, in order to evaluate an alternative heterologous prime-boost regimen based on the AdCh3, for the priming, and a Modified Vaccinia Ankara vector encoding NSmut, for the boosting (HCV003). Update: Company completed a 16mm EUR financing in Sep 2010 led by Versant Ventures.

Pevion Biotech AG - In Nov 2010 reported positive preliminary results from a Phase I study of PEV7, the first vaccine against recurrent vulvovaginal candidiasis (RVVC). Also known as chronic recurrent thrush. Occurs in 3 to 6% of women. ([Link](#))

**VaxInnate** - Developing **Universal flu vaccines**. Strong Phase 2 data. Company is open to a sale.
Virionics - VLPs for HPV and HCV. Therapy and diagnostics story. MediGene holds exclusive marketing rights to CVLP products in Germany and co-exclusive marketing rights for the rest of Europe. (Link)

Xiamen Innovax Biotech - Has developed a Hepatitis E vaccine that has recently been shown to be completely effective in the prevention of Hepatitis E in a 110,000 patient clinical trial. Approximately 30% of the world’s population has Hepatitis E. Xiamen open to licensing rights to this product outside of China. (Link)

**VIROLOGY**

**UPDATE** Achillion - Phase 2b 12-week study underway for ACH-1625, for hepatitis C. Very positive Phase 2a data. The drug candidate is an inhibitor of NS3 protease. Phase 1b data were quite promising showing a 4 log10 reduction in viral load. In preclinical studies ACH-1625 has demonstrated potency, unique pharmacokinetic properties and a safe in vivo profile even at very high doses. (Link)

**NEW** Achillion - On Dec 4, 2011 reported proof-of-concept data from its Phase 1b clinical trial of ACH-2928, a first-generation NSSA inhibitor, demonstrating that patients treated with ACH-2928 achieved a mean maximum 3.68 log10 reduction in HCV RNA after three-day monotherapy of 60 mg once daily. The compound also demonstrated good safety and tolerability both in healthy volunteers and in patients with chronic hepatitis C (HCV).

Adamas Pharmaceuticals - Pursuing Triple Combination Therapy for Influenza (ADS-8902). Adamas Pharmaceuticals, Inc., a privately held company, announced today that it has expanded its Phase 2 clinical study of a proprietary investigational triple-combination antiviral drug therapy for influenza to include centers in the United States, Canada and Europe. (Link)

Aicuris - Good Phase 2 data in treatment of human CMV. Looking to outlicense this compound. Recently granted orphan designation by COMP of the EMA.

Aicurus - Phase 2 data for AIC-316, herpes simplex product. Looking to partner global rights before running Phase 3 trial. Large market with data to be released in early 2011.

**COMPLETE** Anadys - ANA598 is a low-nanomolar inhibitor of HCV genotype 1a and 1b replicons via N5b polymerase. Has started a Phase 2 trial. Anadys also has ANA773, an oral inducer of endogenous interferons with nice Phase 1 data. May 2010 - Lazard retained to act as advisor to Anadys to explore strategic alternatives. Nov 2010 press release: Anadys continues to work with Lazard Frères & Co. LLC. to explore potential strategic transactions, in parallel with moving the ANA598 and ANA773 programs forward. Update: Oct 17, 2011 - Roche acquires Anadys for $230mm - a 256% premium.

Agenus - AG-707 is an investigational vaccine consisting of recombinant human heat shock protein-70 complexed with 32 distinct synthetic antigens from the HSV-2 proteome. Has finished Phase 1 studies.

Aveva - In Phase 3 for apricitabine with positive data, a next generation NRTI for HIV (origin Biochem Pharma / Shire). Announced on July 6, 2011 that it had retained Pharma Ventures to assist in outlicensing this compound.

Avila Therapeutics - Developing AVL-181 which silences proteins. Works as a pan-genotype protease inhibitor for Hepatitis C with promising pre-clinical data. Update: Nov 29, 2010 - Avila publishes further work in Nature showing increased selectivity, potency and duration of action of this NS3 inhibitor. (Link)

Avir Green Hills Biotechnology - deltaFLU is a live attenuated influenza virus with an optimal balance between attenuation and immunogenicity. Produced in CHO cells. deltaFLU is applied intranasally with a spray device. Positive Phase 1 data. (Link)
Beech Tree Labs - In Phase 2 for an agent to treat herpes simplex. The agent BTL-TML-HSV is a broad antiviral and inhibits viral reassembly after infection and viral uncoating. Update: company recently completed a financing which will facilitate completion of the clinical trial. (Link)

BioAlliance Pharma - Looking to partner acyclovir Lauriad for herpes labialis. (Link) BioAlliance Pharma, today announces final positive results of its pivotal phase 3 clinical study in immunocompetent patients with recurrent herpes labialis (LIP Study) treated with acyclovir Lauriad. Primary and secondary endpoints have been met with marked efficacy and good tolerance. (Link)

NEW $ BioAlliance Pharma - searching for a U.S. Partner for Oravig. Oravig is miconazole buccal tablets for the treatment of oropharyngeal candidiasis (OPC), more commonly known as thrush, in adults and children age 16 and older. This drug was returned by Strativa Pharmaceuticals recently to BioAlliance. (Link)

NEW BioCryst Pharma - developing peramivir, a Phase 3 IV antiviral treatment for influenza. Has substantial promise. (Link)

BioDiem - Working on a cell-based influenza vaccine. In Phase 2 studies. Open to a global partnership deal. (Link)

Biolex - Finishing up Phase 2 for a long-acting interferon for Hepatitis C (Loctemapron).

Bionor Immuno - (Vacc-4x) HIV vaccine generates a positive immunologic response in Phase 2 trials. Ongoing Phase 2b study with data to report out in the next six months. Update: product failed to show any effect in a Phase 2 trial.

Biota - Looking to partner a once weekly inhalable long-acting neuraminidase inhibitors for the treatment of flu. Would compete against Relenza from GSK. Currently partnered with Daichi-Sankyo in Japan. One of two Phase 3 studies have reported out with positive data - large market. Recently received a large BARDA grant and has retained Piper Jaffray as financial advisor to maximize value of existing programs and help to enter the U.S. market on a commercial basis. (Link)

Biota Holdings - Looking to partner a product to treat the common cold. Specifically, canyon-like clefts on rhinovirus surface attach to the receptor allowing infection. Biota achieved proof of concept in a Phase Ila (challenge study) in 2009. Now in Phase 2b studies for this product. (Link)

Biontron - BIT225 represents a first-in-class drug for treatment of HCV, targeting the p7 protein of HCV. In a Phase 2a study with data reporting out in September 2011. (Link)

Chimerix - CMX001 is a lipid mimic of cidofovir that more easily passes into cells and then targets double viruses including herpes viruses and orthopoxviruses. Current in Phase 2 against CMV and BK virus. A recent trial showed that this drug works better than existing antivirals in persons with impaired renal function. In active partnership talks. Also in development for smallpox. (Link)


NEW Endeavor Vision - LMV-601 is the first in a new class of drugs known as PC-PLC inhibitors. It has outstanding antiviral properties resulting from the inhibition of early viral gene transcription. It is currently in clinical development (Phase I on infected patients) for the treatment of Human Papillomavirus (HPV) infection of the cervix.

Epiphany Bio - Developing EPB-348. Good results so far for Herpes Zoster through Phase 2b trial. No partnership announced thus far. Also developing a compound for mono. Licensed from Medivir. (Link)
Flamel - Looking to license a long-acting IFN-alpha (compare to PEG-INTRON) for Hepatitis C which is currently in phase II. Better AE profile and strong efficacy in trials to date. Flamel Technologies Announces the Initiation of a Phase 2a Clinical Trial of Flamel's IFN-Alpha-2b XL in Patients with Chronic Hepatitis C Virus Infection.

GlobelImmune - Strong efficacy in treating Hepatitis C with GI-5005 a viral fusion protein. Phase 2b data show that the HCV vaccine increased sustained virologic response by 12 percent in patients who previously failed therapy with standard of care. (Link)

Idera - looking to partner IMO-2125, its TLR9 agonist for hepatitis C (HCV) after positive Phase 1 data. Mechanistically, this is a DNA-based compound that stimulates an innate immune response, including the induction of high levels of interferon-alpha and other cytokines that work to suppress HCV viral replication. Phase 2 studies have been delayed. (Link)

**UPDATE** Inhibitex - Reported Phase 2 data in December 2010 from a clinical trial of FV-100, its antiviral compound in clinical development for the treatment of herpes zoster (shingles). While the results showed improvements in the reduction in the severity and duration of shingles-associated pain of 3% and 7% for the 200mg and 400mg patient cohorts, it was far from the 25% reduction called for as the primary endpoint, and not statistically significant. Open to partnering this compound.

Inhibitex - Pursuing a nucleotide polymerase inhibitor for HCV which has shown high promise in Phase 1b data reported on November 29, 2011. INX-189 with a substantial reduction in HCV RNA. (Link)

Innate Pharma - Looking to partner IPH-1201, a gamma-delta agonist immune modulator, for Hepatitis C. Solid Phase 2a data reported at EASL.

Inovio - Looking for partnerships based upon its Syncon vaccine platform. Syncon facilitates better vaccines that address changing strains of diseases, including HIV, HCV, HPV, and influenza. Planning to complete a Phase 1 for a universal flu vaccine in 2011. Has shown positive results in recent HIV vaccine Phase 1 study. Starting a Phase 2 study in 2011 in cervical cancer. (Link) (noncon)

**NEW** Japan Tobacco - looking to partner JTK-853, an RNA polymerase inhibitor for the treatment of Hepatitis C. Has completed POC in a Phase 1 study.

**NEW** LG Life Sciences - LB80380 - Phase 2 novel nucleotide polymerase inhibitor for chronic HBV infection. An ester prodrug of phosphonate nucleotide analogue of guanosine monophosphate with potent activity against hepatitis B virus (HBV). Designed to overcome problems of currently approved HBV drugs such as resistance and renal tox.

**UPDATE** Marinomedi Biotechnologie - The privately-held Austrian biopharmaceutical company is in talks with pharma players to outlicense its lead compound MAM-05.101, is an antiviral nasal spray for the treatment of the common cold - particularly in children. This product is a GRAS botanical and has shown good efficacy in a Phase 2 type trial. Can likely be introduced to the market now as either an OTC product or medical food. On market in EU. Looking for licensing partner for U.S., Canada and Japan. In Austria the nasal spray has been marketed since 2008, the product was licensed to Boehringer Ingelheim for Europe, Russia and CIS, South America, parts of Asia and Australia in 2010.

Mymetics - Has hired Lazard to look at its strategic alternatives. Company developing mucosal antibodies to prevent HIV infection. Phase 1 data show safe and well tolerated. Also has a preclinical RSV vaccine. (Link)

Myrexis - Portfolio includes Vivecon, a Phase 2 maturation inhibitor for HIV. Company also has additional pre-clinical HIV products. Has suspended development of this product and is seeking an external partner. (Link)

NanoViricides - Early stage treatments for influenza and avian flu. (Link)
**UPDATE** Neurotune - Positive top-line results from its Phase IIa study of dimiracetam (NT-11624) for treatment-induced neuropathic pain in HIV patients receiving anti-retroviral medication. Phase 2b study to start in 2012 under recently granted IND. ([Link](#))

Okairos - Hepatitis C vaccine in development has shown T-cell response in Phase 1. ([Link](#)) A second Phase I study is going to be started soon, in order to evaluate an alternative heterologous prime-boost regimen based on the AdCh3, for the priming, and a Modified Vaccinia Ankara vector encoding NSmut, for the boosting (HCV003).

**COMPLETED** Pharmasset - Positive results for PSI-7851 in Phase 1 studies, a second generation polymerase inhibitor for Hepatitis C. Has also seen positive Phase 1 data with PSI-938, a guanosine nucleotide analog polymerase inhibitor. Recently entered a combination study with Tibotec. Update: company bought by Gilead for $14bn on Nov 22, 2011.

Presidio Pharmaceuticals - (PPI-802) is less subject to resistance for HIV treatment. In Phase 2. ([Link](#))

Presidio Pharmaceuticals - PPI-461, preclinical small-molecule NS5A inhibitor for hepatitis C. Has shown favorable data and is well-suited to be a part of an oral combination drug for HCV. Reported Phase 1a data that were favorable in July 2010. Also presented further positive clinical data at AASLD 2010. Announced positive Phase 1b data on March 30, 2011.

**UPDATE** Protein Sciences - Has FluBlok for treatment of influenza. Pending BLA with an approval likely. Company is exploring an IPO.

**NEW** Progenics - looking to outlicense its virology pipeline. Included is PRO-140, a Phase 2 antibody for HIV. Unlike small-molecule CCR5 antagonists, PRO 140 inhibits HIV entry at concentrations that in vitro do not appear to block CCR5's natural activity of directing the migration of immune cells towards sites of inflammation in the body. ([Link](#))

**NEW** Quantum Pharmaceuticals - Matrix M1 protein inhibitors for the management of influenza. ([Link](#))

Redox - Phase 2 trials of Doxovir, a non-nucleoside analogue, for Herpes labialis, have been successful. ([Link](#))

**NEW** Santaris Pharma - Phase 2a data of miravirsen, a microRNA-targeted drug, shows dose-dependent, prolonged viral reduction of 2-3 logs HCV RNA after four-week treatment in Hepatitis C patients. ([Link](#))


**UPDATE** Scynexis - SCY-635 targets cyclophilin for treatment of Hepatitis C. Novel mechanism and promising Phase 1 data. Currently in Phase 2 studies.

Shire - Would outlicense Gene-Activated Human Growth Hormone (GA-IFNα) - for Hepatitis C.

**UPDATE** Starpharma - positive data for VivaGel. VivaGel® is being developed for the prevention of HIV and HSV-2 (genital herpes). It has also shown very promising activity against the human papillomavirus (HPV). Starpharma commenced a dose ranging Phase 2 trial in 2010 in 132 patients. Two Phase 3 trials (200 patients in each trial) that would aim to establish the effectiveness of Vivagel in preventing recurrence of the infection, are also planned.

Symphogen - Novel polyclonal antibody technology platform with a promising antibody in development for RSV (Sym003), still in the pre clinical stage.

Toyama - T-705 (favipiravir), a viral RNA polymerase inhibitor, is in Phase 3 studies in Japan and Phase 2 in the United States as a highly promising anti-viral drug for the treatment of influenza. ([Link](#))

**H** VaxInnate - Developing Universal flu vaccines. Strong Phase 2 data. Company is open to a sale. Recently received a major U.S. government contract.
Virionics - VLPs for HPV and HCV. Therapy and diagnostics story. [Link] Moreover, MediGene holds exclusive marketing rights to CVLP products in Germany and co-exclusive marketing rights for the rest of Europe.

Xiamen Innovax Biotech - Has developed a Hepatitis E vaccine that has recently been shown to be completely effective in the prevention of Hepatitis E in a 110,000 patient clinical trial. Approximately 30% of the world’s population has Hepatitis E. Xiamen open to licensing rights to this product outside of China. [Link]

**WOMEN’S HEALTH**

Acrux - regained rights in May 2011 to Luramist®, a testosterone spray for women to enhance female sexual function. This program has progressed through Phase 2 studies with Vivus. Also has a promising Phase 1 completed progestin solution for birth control. [Link]

$ Acrux - rights outside of the U.S. are available for Estradiol MDTS® is a novel Estradiol Metered Dose Transdermal Spray (MDTS®) hormone replacement product for the treatment of moderate to severe symptoms due to menopause. This product was recently approved in Sweden and has pending approvals in a number of other countries.

Adamis - successful completion of a Phase 3 contraceptive trial of the company's contraceptive gel product candidate named Savvy (C31G) in Dec 2010. Looking to outlicense this product.

Agile Therapeutics - AG20015 is a low-estrogen dose once-weekly contraceptive patch containing levonorgestrel (100-120mcg) and ethinyl estradiol (25-30mcg) as active ingredients. This product has successfully progressed through Phase 2 studies and has high promise. Company is preparing to go into Phase 3 studies. Agile is also in Phase 2 with a contraceptive product that does not use estrogen. [Link]

Alliance Pharma - Isprelor contains misoprostol as an active ingredient. It is a synthetic PGE1 analogue and serves on both to ripen the cervix and augment labor as a one-step labor induction agent. Isprelor is being developed as vaginal tablets (25mg) for the induction of labor and has completed Phase 3 studies. [Link]

Antares Pharma - has published successful results from a dose-finding Phase 2 trial for a novel contraceptive gel containing the progestin Nestorone and estradiol (NES/E2) utilizing the Antares ATD (advanced transdermal delivery) gel system. This program is in Phase 3 studies. [Link]

Anterior Therapeutics - has finished Phase 2 studies for Annuelle III, a contraceptive product that lasts for three years. [Link]

Aoxing Pharmaceutical Company - Has enrolled over 120 patients in its on-going Phase 3 clinical studies of oral TJSL Capsules, a novel investigational drug to treat primary dysmenorrhea ("PD"), or menstrual pain, in adult women. This product is based upon Chinese herbs. [Link]

Apricus Bio - Femprox contains alprostadil which is a synthetic version of prostaglandin E1 (PGE1), a naturally occurring vasodilating agent which increases blood flow to the female genitalia. Apricus Biosciences has completed one Phase 2 trial in the United States and one Phase 3 study in close to 400 women in China, which achieved a 44% positive response rate as compared to a placebo. Looking for a development partner. [Link]

NEW Athena DDS - Has a one shot treatment for bacterial vaginosis. Secnidazole 2gm single dose is comparable to 7 days treatment with Metronidazole tablet. Sachets are well accepted by patients and easy to use. Has been approved in France.

NEW Ausio Pharma - AUS-131 is a first-in-class, nonsteroidal, nonhormonal estrogen receptor β (ERβ) agonist that offers a potentially safer alternative to estrogen for the treatment of menopausal symptoms and is currently in Phase 2a clinical trials. [Link]
Bionovo - Looking to partner a SERM with promising Phase 2 data for hot flashes. This is based upon a botanical product. Does not bind to estrogen receptor alpha. ([Link](#))

**UPDATE** Biosante - LibiGel (testosterone gel) for female sexual dysfunction is fully enrolled in a pivotal Phase 3 study, and is designed to be quickly absorbed through the skin after a once-daily application. Company expects to announced topline results from its pivotal study program shortly.

Bio-Term Pharmaceuticals - developing a drug candidate for the prevention of pre-term birth. ([Link](#))

Burdica - Zestica Fertility™, a personal lubricant using the fertility enhancing properties of HA. The product range was subsequently augmented by the introduction of Zestica Moisture™, designed to alleviate the dryness and discomfort which is experienced after menopause. ([Link](#))

Chiesi - Would outlicense CHF4227 program (SERM) that has completed Phase 1 testing.

Concert Pharmaceuticals - CTP-347 for hot flashes in Phase 1 which is completed. Good efficacy story. ([Link](#))

**COMPLETED** $ Cytokine Pharmasciences - A number of women’s health products including applications in the OB area - Misodel for labor induction, c-vad for bacterial vaginosis and Premis for cervical softening. Update: Company acquired by Ferring on October 24, 2011. ([Link](#))

Dilafor - DF-01 (tafoxiparin) is being developed as a subcutaneous injection for the prevention and treatment of protracted labor (prolonged labor) during child birth. In a randomized, double-blind, placebo-controlled clinical trial on 263 women showed that treatment with tafoxiparin provided a statistically and clinically significant reduction in the incidence of protracted labor and caesarean sections. ([Link](#))

$ Dong-A Pharma - Outlicensing Gonadopin® - a recombinant human follicle stimulating hormone (rec-hFSH) for controlled ovarian hyperstimulation. Launched in Korea. Note: a similar product was recently in-licensed from Itero to Watson Pharmaceuticals. Other similar products available for license from Ibsa and LG.

Easton Pharmaceuticals - VIORRA, is an over-the-counter aid for the treatment to restore and improve vaginal moisture and elasticity which has a very positive effect on women’s sexual desire and arousal. Regulatory approval in Mexico pending. ([Link](#))

Embil - Would outlicense Cortos cream for hemorrhoids and anal fissures. ([Link](#))

**NEW** Endoceutics - developing Femivia for the treatment of issues associated with hormone deficiency in post-menopausal women (e.g., memory loss, diabetes, muscle loss). This product is in Phase 3. ([Link](#))

FemmePharma - Running an open-label, multicenter Phase 2a evaluation of the use of topically administered FP1198 for the treatment of moderate to severe cyclic breast pain (cyclic mastalgia). ([Link](#))

GlycoTope - FSH-GEX is a Phase 1 follicle-stimulating hormone produced recombinantly with a fully human glycosylation. FSH-GEX is being developed as subcutaneous formulation based on GlycoExpress technology for the treatment of infertility. ([Link](#))

Hisamitsu / Noven - positive Phase 2 data for low dose oral paroxetine mesylate for treatment of hot flashes (MesaFem). May be interested in finding a partner for this product.

HRA Pharma - Two UPA contraceptive products (UPAC-ring and UPAC-IUS) based on the molecule ulipristal acetate, a new chemical entity which modulates the activity of the progesterone receptor. This is in Phase 2 trials. ([Link](#))

**NEW** IBSA - Fostimon is a highly purified human-derived FSH, i.e. the natural pituitary follicle stimulating hormone. Approved or close to approval in most territories.
Instead Sciences - Amphora is a lubricating vaginal gel that has demonstrated efficacy in preventing conception and STIs in extensive in-vitro studies and human clinical trials.

Kade - Would outlicense Cliovelle - a low dose Estradiol / Progestin combination product for treatment of menopausal disorders.

Medtritina - has hired Robert W. Baird to explore strategic options. Company working with aromatase inhibitors, MPI-676 and MPI-674 candidates which are headed to Phase 3 trials. (Link)

Mithra Pharmaceuticals - In Phase 2 for the treatment of cervical dysplasia with cidofovir as an active agent. (Link)

NEW Pantec - FSH Patch in Phase 2 testing for infertility treatment.

PearTree Women’s Healthcare - PT-201 and 01 for treatment of urogenital atrophy. PT-100 is a fixed dose combo of estriol and progesterone as a vaginal suppository. PT-101 is a vaginal suppository containing a SERM indicated for prevention of urigenital atrophy associated with menopause. (Link)

Pevion Biotech AG - In Nov 2010 reported positive preliminary results from a Phase I study of PEV7, the first vaccine against recurrent vulvovaginal candidiasis (RVVC). Also known as chronic recurrent thrush. Occurs in 3 to 6% of women. (Link)

Repros Therapeutics - Proellex off clinical hold in Phase 3 for uterine fibroids. Has resumed studies and has enrolled the fourth cohort in a low dose Proellex study as of June 2011.

$ Semprae Laboratories - markets Zestra, an OTC product for female sexual arousal enhancement. This product is backed by clinical studies showing its efficacy. Company is open to promotional or partnership deals.

Starpharma - VivaGel® is being developed for the prevention of HIV and HSV-2 (genital herpes). It has also shown very promising activity against the human papillomavirus (HPV). In August, reported positive data from a Phase 2 trial. The study showed that treatment with VivaGel (containing 1% of the active, SPL7013), once daily for seven days, resulted in 74% of patients achieving Clinical Cure of BV 2 to 5 days after completion of therapy compared with just 22% in the placebo group (P=0.0002). (Link)

Trimel Biopharma - Phase 2 data were positive for an intranasal testosterone product for FSD.

Undisclosed player - Partnering a Phase 2 progesterone modulator for uterine fibroids and endometriosis.

Undisclosed player - Partnering a Phase 3 ready drug for bacterial vaginosis. Differentiated from current treatments.

COMPLETED $ Undisclosed party - looking to sell a portfolio of marketed prenatal vitamins with assistance from Torreya Partners. Interested parties should contact Tom Bird (tom.bird@torreyapartners.com).

$ Undisclosed player - selling a group of marketed hormone products with the assistance of Torreya Partners. Interested parties should contact Tom Bird (tom.bird@torreyapartners.com).

UPDATE Vantia - Pursuing VA111913, a vasopressin antagonist for dysmenorrhea, menstrual cramping pain. An exploratory Phase 2 trial of VA111913 showed promising evidence of reduced pain levels in patients receiving the drug candidate. (Link)

Vytéri - has indicated that it is interested in disposing of a portfolio of products in development. These products include a patch that delivers a fertility enhancing hormone. (Link)

Zelos - A better PTH analogue. Strong Phase 2 data. Company also pursuing an intranasal PTH and a potential “biogeneric” PTH. (Link)
WOUND CARE AND TISSUE SEALANTS

Adocia - In a Phase 2 trial for the treatment of diabetic foot ulcers against Regranex with rhPDGF-BB spray. Interim results show non-inferiority. (Link)

UPDATE $ Alliqua - Hydress +Plus™ received FDA approval for a silver-based wound dressing. Company open to using an external marketing partner. (Link)

Auxano Biomedical / Emergent Bio - Developing SP-1 for wound repair along with some wound diagnostic tools. (Link)

UPDATE $ Cohera Medical - Developing TissueGlu, a deep wound adhesive for use in surgical applications. This product is currently approved in Europe and on the market in Germany. A PMA approval process is underway in the United States.

$ Coloplast - Rumored to be considering disposal of wound care product line including Antimicrobials, foam dressings and a fast gelling alginate.

UPDATE Derma Sciences - completed Phase 2 studies in diabetic foot ulcers of DSC127 which appears to stimulate production of dermal adult progenitor cells, including mesenchymal stem cells, following injury. In June 2011, Derma raised $29mm in a private placement financing. The company is now preparing to go into Phase 3 studies. (Link)

FirstString Research - Bioengineered peptide based on a naturally occurring protein that accelerates wound healing and tissue regeneration with significantly reduced scarring. Positive Phase 1 data reported in Sep 2010. (Link)

First Texas Medical - innovative portfolio of wound care and dermatology products.

UPDATE Glycotex - GLYC-101 is being developed to stimulate and modulate the natural cascade of wound healing activities of several cell populations (including upregulation of TNF-alpha). The product candidate is a topical gel to be applied directly on the wound surface. In May 2006, Glycotex completed a Phase 2 clinical trial of GLYC-101 in Australia, in which GLYC-101 produced a statistically significant rate of wound area reduction versus combined placebo and standard care in patients with chronic venous ulcers. In June 2011, positive results of another Phase 2 study were reported. (Link)

UPDATE $ Innocoll - CollaRx GENTAMICIN TOPICAL is a biodegradable and fully resorbable Gentamicin-Collagen Sponge formulated and manufactured using Innocoll’s proprietary collagen-based drug delivery technology, CollaRx. Treats wound infections and shown in one Phase 2 trial to be superior to the current standard of care in diabetic wounds. This product was recently approved as a surgical adhesion barrier in Europe. Company beginning Phase 3 trials of this product in 2011. Note: Distribution partnerships have been initiated in 2011 for both Canada and China. (Link)

UPDATE NB Therapeutics - Nitric oxide gas can be used for wound healing. Has been in a Phase 2 study but no recent updates on clinical development of this product. (Link)

Pervasis - Developing Vascugel, a cell therapy product, to accelerate vein remodeling for patients receiving an AV fistula (AVF) in end stage renal disease. Compare to Proteon Therapeutics which has optioned a product for the same indication to Novartis. Update: In a Phase 2 trial. Results pending.

PharmaSurgics - in Phase 2 development for a pharmaceutical for anti-adhesion treatment after surgery. Very promising approach. The Pergamum Operating unit located in Gothenburg - has received approval from the German Regulatory Authority and the Independent Ethics Committee to begin a Phase 2 clinical trial in Germany. (Link)
**UPDATE**  ProFibrix - Developing a surgical tissue sealant that stops acute and severe bleeding. FibroCaps are a novel powdered mixture of fibrinogen and thrombin. Phase 2 clinical testing is currently ongoing in the Netherlands where FibroCaps is used for the treatment of the mild to moderate bleeding during liver surgery. ProFibrix expects to finalize the study shortly. Update: Entered into a component supply agreement with CSL Behring in June 2010. Update: In July 5, 2011, ProFibrix raises US $11 million in series B financing for Fibrocaps. On Nov 15, 2011 reported that its Phase 2 trial met its primary endpoint (50% reduction in mean time to hemostasis versus active control). Company planning to start a Phase 3 study shortly.

Third Stream Bioscience - Developing a novel skin antimicrobial based upon a chemical composition developed by Procter & Gamble. Promising data in dermatology (acne) and a variety skin cleansing applications.

Undisclosed - Large pharmaceutical company interesting in outlicensing a late stage program in wound care.
Torreya Partners LLC is a leading boutique investment banking firm that provides strategic advice and assistance with Mergers & Acquisitions, Partnering and Financings to life science companies worldwide. Torreya Partners has offices located in London, New York, Philadelphia and San Francisco.

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<th>Geography</th>
<th>Mobile Phone</th>
</tr>
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<td>$25mm</td>
<td>Acquisition of royalty-linked securities</td>
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<td>Undisclosed</td>
<td>Acquisition of a dermatology Rx product</td>
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<td>Completion of bridge financing</td>
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<td>Undisclosed</td>
<td>Sale of pre-natal vitamin line</td>
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<td>Biotech company</td>
<td>October 2011</td>
<td>Undisclosed</td>
<td>Pain product licensing transaction</td>
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<td>Amorcyte</td>
<td>October 2011</td>
<td>$20mm</td>
<td>Sale of cardiac cell therapy company to Neostem Inc.</td>
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<td>Ventrus Bio</td>
<td>July 2011</td>
<td>$52mm</td>
<td>Financial Advisor in a follow-on equity financing</td>
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<td>Predictive Edge</td>
<td>July 2011</td>
<td>Undisclosed</td>
<td>Equity financing for a novel IT company with significant pharmaceutical industry applications.</td>
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<td>Two fund groups</td>
<td>June 2011</td>
<td>$110mm</td>
<td>Sale of pharmaceutical product royalty interests on behalf of two fund groups.</td>
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<td>Global Pharma Player</td>
<td>June 2011</td>
<td>Undisclosed</td>
<td>Sale of an approved hospital drug with global distribution</td>
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<td>Specialty Pharma Player</td>
<td>June 2011</td>
<td>Undisclosed</td>
<td>Co-promotion agreement in the pain area for a marketed product in the U.S.</td>
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<td>May 2011</td>
<td>Undisclosed</td>
<td>Sale of the company to Pharmasine</td>
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<td>May 2011</td>
<td>Undisclosed</td>
<td>Strategic alliance in oncology with Helsinn</td>
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<td>Sale of Cubicin and Lexiscan royalty interests to Royalty Pharma.</td>
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<td>Undisclosed</td>
<td>Fairness opinion in the acquisition of Adagio Pharmaceuticals</td>
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<td>Lpath, Inc.</td>
<td>December 2010</td>
<td>Up to $504mm (14mm upfront)</td>
<td>License of iSonep antibody to Pfizer for ophthalmology using an option structure.</td>
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<td>Quinnova Pharma</td>
<td>December 2010</td>
<td>Undisclosed</td>
<td>Sale of company to Amneal LLC for an undisclosed price.</td>
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<td>$100mm +</td>
<td>Sale of company to Kadmon, Inc.</td>
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<td>Purchase of products with $54mm in revenue from UCB to form a new specialty pharma company.</td>
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<td>$108mm +</td>
<td>License of progesterone business to Watson Pharmaceuticals</td>
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<td>Merger with Thorne Research, a $30mm revenue player in neutraceuticals.</td>
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<td>Undisclosed</td>
<td>December-09</td>
<td>$400+mm</td>
<td>In-license of an investigational hospital drug.</td>
<td></td>
</tr>
<tr>
<td>Ikonisys</td>
<td>December-09</td>
<td>Undisclosed</td>
<td>Partnership of OncoFISH Cervical with Enzo</td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td>Date</td>
<td>Amount</td>
<td>Details</td>
<td></td>
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<tr>
<td>-------------------------</td>
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</tr>
<tr>
<td>Nabi Biopharma</td>
<td>November-09</td>
<td>$48mm</td>
<td>Sale of Pentastaph to GlaxoSmithKline (with milestones)</td>
<td></td>
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<tr>
<td>Athryium Capital</td>
<td>September-09</td>
<td>$10mm</td>
<td>Purchase of Telaprevir Milestone Payments from Vertex</td>
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<tr>
<td>Introgen Therapeutics</td>
<td>September-09</td>
<td>$31 + mmroyalties</td>
<td>Sale of rights to drug pipeline to asset management company.</td>
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<tr>
<td>Teikoku Pharma</td>
<td>May-09</td>
<td>Undisclosed</td>
<td>Purchase of Travanti Pharma</td>
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<tr>
<td>Introgen Therapeutics</td>
<td>April-09</td>
<td>Undisclosed</td>
<td>Sale of ITS to Western General (later sold to Lonza) and IP Portfolio to Crucell.</td>
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<tr>
<td>Investor Group</td>
<td>March-09</td>
<td>$47,000mm</td>
<td>Advisor to Genentech minority investor group in Roche acquisition.</td>
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<tr>
<td>Aradigm</td>
<td>February-09</td>
<td>$4.5mm</td>
<td>Financial Advisor in Registered direct financing.</td>
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<tr>
<td>AGI Dermatics</td>
<td>September-08</td>
<td>Undisclosed</td>
<td>Sale to Estee Lauder Companies</td>
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<tr>
<td>Portola Pharmaceuticals</td>
<td>July-08</td>
<td>$60mm</td>
<td>Financial Advisor in Series D Preferred Financing</td>
<td></td>
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<tr>
<td>Navitas Pharma</td>
<td>May-08</td>
<td>Undisclosed</td>
<td>Sale to Gilead</td>
<td></td>
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<tr>
<td>ProEthic Pharma</td>
<td>March-08</td>
<td>60mm</td>
<td>Sale to Kowa</td>
<td></td>
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<tr>
<td>Midlothian Laboratories</td>
<td>December-07</td>
<td>7mm</td>
<td>Sale to Hi-Tech Pharmacal</td>
<td></td>
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