

Deal Watch



A review of notable deals from Medius Associates

By Bridget Lacey

In this regular review of deals, our focus this time is on transactions announced during October. Whilst our main focus remains deals where financial terms are disclosed, we continue to include a few deals for which financials were not published, where notable. This month there was a range of deal types, including spin-offs, asset sales, business sales and collaboration extensions interspersed with the more usual licence and acquisition transactions.

Oncology Deals Dominate

Servier announced a strategic alliance with **Galapagos**, to develop novel small molecule therapies for cancer. This deal is heavily “back-loaded” with upfront research access payments of only US\$3 million, but up to US\$370 million in milestones plus royalties, should Servier exercise its options to license (post pre-clinical development).

Servier will fund the clinical development and commercialisation whilst Galapagos retains the rights to the US. As Servier does not have a sales presence in the US; this is an effective model for the company’s partnering activities. This alliance follows a previously initiated strategic alliance between the companies to develop new therapies in osteoarthritis (OA) in July 2010.

Continuing the oncology theme, **Merck Serono** and **Ono** have announced they are collaborating in multiple sclerosis and oncology in two separate agreements. The first grants Merck worldwide exclusive license rights for the development and commercialisation of ONO-4641 outside Japan, Korea and Taiwan. ONO-4641 is a novel oral treatment for multiple sclerosis in Phase 2. Merck will pay US\$20 million upfront.

The second licence agreement provides Ono with co-development and co-marketing rights for Stimuvax in Japan.

Stimuvax is a therapeutic cancer immunotherapy designed to stimulate the immune system to target cancer cells that express the tumor antigen MUC-1. It’s in Phase 3 for patients suffering from non-small cell lung cancer. Ono will pay Merck US\$7 million upfront. This is a classic *quid pro quo* arrangement which makes the most of each company’s territorial strengths.

Following more than two years of wrangling, **Onyx Pharmaceuticals** and **Bayer Healthcare** have resolved their differences over rights to regorafenib under their 1994 oncology partnership. Onyx was suing; claiming regorafenib is a variant of Nexavar (sorafenib) (both oral multi-kinase inhibitors) and should have been treated as part of the companies’ joint Nexavar project.



Onyx claimed regorafenib’s molecular structure differed from Nexavar only in one atom. In contrast, Bayer argued that regorafenib, in Phase 3 for treatment of gastrointestinal tumours (fast-track status in the US) and metastatic colorectal cancer, was not covered by their original collaboration.

It is also in trials for other cancers, including liver and kidney (for which Nexavar is already approved). The partnership for Nexavar is restructured (Bayer is buying the rights to Onyx's Japanese royalty stream for US\$160 million) and they have entered into a new agreement for regorafenib, with Onyx receiving a 20% royalty and co-promotion rights in the US. Confirmation these terms will be preserved following any change in control of Onyx, may be an attractive lure to potential suitors.

Also in the oncology space, **Pfizer** has licensed the worldwide commercial rights of Neratinib, a Phase 2 pan-HER inhibitor (potent irreversible tyrosine kinase inhibitor) in the neoadjuvant, adjuvant and advanced settings in HER2/ErbB2 positive breast cancer, to **Puma Biotechnology**. Pfizer will receive undisclosed milestone payments and royalties. Pfizer also inked a US\$340 million deal for access to GlycoMimetics' GMI-1070 in Phase 2 for vaso-occlusion associated with sickle cell disease.

RNAi

... still alive and kicking

RNA interference (RNAi) is an area that has suffered from big pharma reticence of late, and so any positive news for this sector is very welcome. A year after the industry was rocked when Roche announced it was moving out of RNAi, due to ongoing frustrations with the cell-specific delivery mechanisms, **Arrowhead Research Corp** announced that it was acquiring the RNAi therapeutic assets from **Roche** (ie operations, facilities, employees, rights, licences and the delivery platform). Through this deal, Arrowhead is now a fully integrated RNAi therapeutics developer with 3 primary siRNA formats. No financial terms were disclosed, but it's understood that Roche acquired a stake in Arrowhead and the rights to negotiate for certain future products, milestones and royalties on product sales.

In another deal in the RNA space, **miRagen** has made a microRNA pact with **Servier** for three candidates for cardiovascular therapy for US\$45 million upfront and three years of financing. There is also up to an additional US\$352 million in milestones and double digit royalties payable to miRagen (totalling US\$1 billion).

miRagen is working with microRNA; short, single-stranded RNA molecules that control the expression of genes and pathways; a potential master switch for gene expression which it's hoped can be targeted without hitting the delivery problems that have stalled progress in this field to date.

Silence Therapeutics and **miRNA Therapeutics** have also signed a collaboration to evaluate delivery of novel microRNA Therapeutics, via Silence's AtuPLEX™ and DBTC delivery systems. No financial terms were disclosed.

Casualties

A couple of deals have collapsed this month. **Merck Serono's** decision to return the rights to Safinamide (an alpha aminoamide in Phase 3, as an add-on therapy to dopamine agonists or levodopa for dyskinesia in Parkinson's disease) to **Newron Pharmaceuticals**, triggered the termination of **Biotie Therapeutics'** acquisition of **Newron**. The ink was still drying a month after Biotie and Newron had announced the US\$45 million deal (see Deal Watch issue 15), but with Newron's lead product tarnished, either Biotie developed cold feet or Newron shareholders were unwilling to adjust their price expectations. Newron should receive a US\$2 million termination fee from Biotie.



The US\$179 million merger between oncology company, **Allos Therapeutics** and **AMAG Pharmaceuticals** announced in July, was terminated when AMAG shareholders didn't vote to accept the deal (hedge fund investor, MSMB, opposed the merger and may have convinced enough other shareholders to reject the deal – see Deal Watch issue 13). AMAG will pay US\$2 million to Allos to cover deal costs.

These fall-outs demonstrate the importance of negotiating the terms of the deal “non-complete” as keenly as any of the other deal terms.

Licensor Acquired / Licensee Acquirer	Product / Technology	Deal Type	Headline (US \$m)
Silence Therapeutics / miRNA Therapeutics	licence	RNAi	n/k
Galapagos / Servier	back ended deal		2
Newron pharmaceuticals SpA / Merck Serono	termination - impact on previous deal with Bioita??	alpha aminoamide adjunct tx	n/k
Roche / Arrowhead research corp	asset acquisition (site / people)	RNAi	n/k
Abbott / Abbott	spin off of pharma arm		18000
Portola Pharmaceuticals / Biogen Idec	collaboration / license	oral Syk inhibitors	554
Adolor Corp / Cubist Pharmaceuticals	company acquisition	opiod receptor agonist	415
Mirage / Servier	Santaris - drug delivery ...	Micro RNA	352
Glycomimetics / Pfizer	licence		340
Anadys Pharma Inc / Roche Holdings AG	acquisition		230
Bayer / Onyx			180
DuoCort Pharma AB / ViroPharma Inc	company acquisition	oral dual release tablet	165
Onyx Pharma / Bayer Healthcare	renegotiation - dispute resolution	oral multi-kinase inhibitor	160
Cephalon / Acino	business sale	generics	112
Syntaxin Ltd / Ipsen SA	R&D collaboration	botulinum toxins	99
Pfizer / Puma	license		55
Novozymes Biopharma Sweden AB / repligen Corp	company acquisition	manufacture growth factors for Mab prod	28
Ono / Merck Serono	ww (excl J, T an SK) excl licence comm/ dev	oral S1P receptor modulator	20
Agios / Celgene	extension of collaboration - April 2010 \$130 plus x*\$120m	research platform	20
Shaanxi Weinan Huaren Pharma / Biostar Pharma	Acquisition		10
Hoopika / VCs		vaccine	10
Merck Serono / Ono	co-dev / co-marketing - JAPAN		7
Epizyme / GSK	milestone payment on top o f		4
Newron Pharma SpA / Biotie Therapeutics Corp 27-9-11	termination of acquisition	alpha aminoamide adjunct tx	2.2
Allos Therapeutics / AMAG Pharmaceuticals	merger	metabolic inhibitor	2

Orphans continue to attract interest

ViroPharma has inked another deal in the orphan drug space. It will acquire **DuoCort** Pharma for US\$34 million upfront and a potential further US\$131 million on achievement of certain regulatory, manufacturing and commercial milestones.

DuoCort's product, Plenadren approved in the EU on 3rd November, is a once daily, dual-release oral glucocorticoid tablet for the treatment of adrenal insufficiency.

This announcement comes weeks after **ViroPharma's** deal with **Intellect Neuroscience**, to license the Phase 1 molecule to treat Friedreich's ataxia, a rare genetic disease.

With these two deals, ViroPharma continues to build a credible presence in the metabolic and CNS franchises for niche and orphan diseases.

Another noteworthy deal in October is **Portola** Pharmaceutical's collaborative R&D and licensing deal for the commercialisation of Syk inhibitors with **Biogen Idec**.

Terms are; an upfront of US\$36 million, a US\$9 million equity investment and additional payments of up to US\$509 million based on the achievement of certain development and regulatory milestones.

Biogen will lead the development and commercialisation for rheumatoid arthritis and lupus, while Portola will lead US efforts for select smaller indications as well as discovery efforts for follow-on Syk inhibitors. Portola retains an option to co-promote in the US. Worldwide costs and profits will be split by Biogen and Portola 75% : 25%, respectively.

Finally, we must make reference to **Abbott's** announcement that it's spinning -out its US\$18 billion pharmaceutical business from its US\$22 billion medical device business. This move serves to reinforce the issue facing many in the industry; namely that investors remain unconvinced that pipelines are sufficiently robust to cope with the impact of impending patent cliffs.

The market took the news positively as the move should allow the two businesses to more effectively drive their business models whilst the shareholders will be hoping the sum of parts will exceed the sum of the whole...

Author Bio **Bridget Lacey**



Bridget brings to the Medius team her international healthcare experience to deliver a strong commercial focus combined with excellent analytical skills and a focus on driving strategic portfolio and investment decisions and in delivering improved business performance.

Bridget is a qualified Chartered Accountant with over 14 years of experience in the Healthcare industry. Bridget completed her accountancy training with Ernst & Young and specialised in business valuations before moving into Healthcare. Bridget has worked in Pharmaceuticals, Vaccines and Life Sciences in roles in the UK and Asia, undertaking a variety of corporate finance (acquisitions and divestitures), integration, business development and alliance management roles at GSK, Chiron and GE Healthcare.

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