The Top 10 Hit Parade of Biopharma Licensing Deals for 2014-2017

by John Carroll on November 20th, 2017

Bayer’s recent deal to partner with Loxo for $400 million in cash inspired this latest analysis of top deals. I thought it would make the top 10, but after reviewing the upfront money paid for licensing pacts over the past three years, it just barely missed the list you’ll see below.

Biobucks remain the currency of choice in deal-making, but it’s the hard upfront cash that tells us what kind of drugs are valued the highest. Not surprisingly, that covers 4 currently marketed drugs and 6 experimental therapies for a total of $7.1 billion in down payments.

Just a casual glance at the numbers below, compiled and sourced from EvaluatePharma, will highlight a simple and overwhelming trend: Cancer drugs remain the one place where the giants are most willing to bet big. Five out of 10 of these deals involved cancer drugs, claiming $4 billion of the total. Three of them are for PD-1/L1 checkpoint therapies.

As we reported recently, there’s a tsunami of checkpoints forming in preclinical development, with 45 in the clinic and 5 on the market. Just how all of these drugs expect to continue to recruit for 1,502 ongoing clinical studies with more than 1,000 combos, is something the industry may not have reckoned with.

Cancer deals have reached a frenzy after the FDA came on strong with an accelerated pathway to approval, blowing aside the traditional clinical stage programs and replacing it with a Phase I/II fast step. The resulting scramble hastipped the R&D scales heavily in cancer’s favor.

At what point do the scales start to rebalance?
Another painful truth? Paying a big upfront is no guarantee of success. Three of these deals involve one drug that just failed a key pivotal, another that involves combos put on hold and a third that is at least a year behind schedule — while also calling for a recalculation and a hand-back on a substantial chunk of the cash involved.

Two of those deals were triggered by Celgene, which is raising questions about its strategy of scooping up high-end licensing deals.

Altogether, only 5 companies either struck the original pacts or bought the company that did: Merck, Pfizer, Sanofi, Celgene and AbbVie. That tells you a lot right there of who’s willing to look past the current scale on valuations. It’s no surprise that companies like Roche, Eli Lilly and GSK didn’t make the list. That, however, could also change.

Deal-making is not for the weak of heart.

1
Merck/AstraZeneca
Merck gets the bidding started with a major league cancer deal as Keytruda continues to perform
Who paid: Merck
Who got paid: AstraZeneca
How much upfront: $1.6 billion
For what: A share of Lynparza
Deal value total: $8.5 billion
When: 7/26/17
Category: Oncology
The scoop: AstraZeneca has been making some real strides on the cancer side of the business, allowing ordeals like this. For blue chip Merck, which has been helping spook the investor crowd with some wonky financials recently, it’s a quick entree to building revenue, working with an established cancer drug that continues to produce solid clinical data to back its use. Merck says it has the money and the inclination to do more of these deals, so stay tuned. The pharma giant has made its big bet on Keytruda, which has paid off big. Now it’s investing in market share.

2
Merck/Bayer
The upside has paled considerably over the past three years
Who paid: Merck
Who got paid: Bayer
How much upfront: $1 billion
For what: Adempas (riociguat)
Deal value total: $2.1 billion
When: 5/6/14
Category: Cardiovascular
The scoop: Back in 2014, Bayer and Merck both had high expectations for Adempas in pulmonary arterial hypertension. But those hopes have shrunk considerably in the past year and a half, after analysts began to write down their peak sales projections and Bayer was forced to shutter a trial among PAH patients with idiopathic interstitial pneumonias. Actelion came along with a new PAH drug to replace its top drug, and J&J scooped it all up in a buyout. Merck also gained regional rights to vericiguat in this deal, which Bayer still counts as one of its top late-stage prospects that can boost its pharma revenue. Bayer, though, which just paid $400 million upfront to partner with Loxo, has had some setbacks in the clinic to contend with. Perhaps it can do better in oncology.

3
Pfizer/Merck KGaA
Pfizer buys a ticket for a quick trip into the checkpoint market
Who paid: Pfizer
Who got paid: Merck KGaA
How much upfront: $850 million
For what: Bavencio (avelumab, PD-L1)
Deal value total: $2.85 billion
When: 11/17/14
Category: Oncology
The scoop: Pfizer wanted in on the whole PD-1/L1 market revolution, and the German pharma company had a program ready and waiting. Pfizer has had some notable successes in oncology, and you’ll see from this list that it has maintained a rep for paying top dollar for whatever it focuses on. The question now is whether the checkpoints become commoditized in a rush of new approvals in the field, with more — many more — on the horizon. The deal also included a co-promotion deal for Pfizer’s Xalkori.

4
Celgene/Nogra
Celgene’s big play on mongersen failed to pay off
Who paid: Celgene
Who got paid: Nogra
How much upfront: $710 million
For what: GED-301 (mongersen)
Deal value total: $2.57 billion
When: 4/23/14
Category: Inflammation
The scoop: This qualifies as one of the biggest licensing flop of the past few years. Celgene solidified its reputation for dealmaking when it struck an alliance with a little-known Irish biotech called Nogra on positive Phase II data. But the Phase III for Crohn’s failed to pan out in one of the most serious setbacks of the years. Celgene has a backup in place for this category, and it needs to come through in a big way.
Sanofi/Regeneron

A better PD-1? They hope so

Who paid: Sanofi
Who got paid: Regeneron
How much upfront: $650 million
For what: REGN2810 (PD-1)
Deal value total: $1.025 billion
When: 7/28/15
Category: Oncology

The scoop: With a near-term application in line for the latest in a series of PD-1 checkpoints, Sanofi and its longtime partners at Regeneron are practically humming with excitement about their prospects on the cancer side of things. Sanofi is stepping back from their long-range partnership on antibody development, which Regeneron is excellent at, but see this therapy as their lead effort in trying (again) to make a splash in oncology. Regeneron’s investigators are confident that they can leapfrog some of the checkpoints already on the market, proving that there’s still plenty of opportunity to enter big markets. But the bar continues to be raised here, years after Merck and Bristol-Myers Squibb got the pioneering OKs.

AbbVie/Boehringer Ingelheim

Some stellar Phase III data faces heavyweight competition

Who paid: AbbVie
Who got paid: Boehringer Ingelheim
How much upfront: $595 million
For what: risankizumab
Deal value total: $595 million
When: 3/7/16
Category: Dermatology

The scoop: Just days ago AbbVie came up with some stellar Phase III data for risankizumab, which will likely sweep into the psoriasis market facing some heavyweight competition. AbbVie went after what has become soft targets in head-to-head studies the field, outdistancing Stelara and its own megablockbuster Humira, which likely has market legs for some years to come before generic competition will start to bite. But there’s lot of competition for the psoriasis dollar. Novartis just rolled out impressive 5-year followup data on Cosentyx, the first of the new-wave drugs to hit the market. Since Novartis elbowed into the market, Eli Lilly has begun fielding Taltz, Valeant is pushing the troubled Siliq and J&J bagged a key FDA win in July for its own blockbuster IL-23 contender guselkumab.
Celgene/AstraZeneca

Yes, another checkpoint deal, but this one has more problems for Celgene

Who paid: Celgene
Who got paid: AstraZeneca
How much upfront: $450 million
For what: Imfinzi (durvalumab, PD-L1)
Deal value total: $450 million
When: 4/24/15
Category: Oncology

The scoop: In hindsight, maybe this wasn’t such a good idea after all. After spotting some serious safety issues in combination studies involving Merck’s Keytruda with Celgene’s widely used multiple myeloma drugs, the FDA has halted a full slate of combination studies, including the ones that pair Celgene and AstraZeneca’s Imfinzi. The trouble here is beginning to focus more attention on the natural limitations that are likely to appear after a Wild West-style explosion of partnerships and new clinical programs. Celgene, though, remains committed to becoming a much bigger player in the cancer arena, and in checkpoints in particular, with a $265 million upfront to partner on BeiGene’s PD-1, BGB-A317, last July.

Sanofi/Hanmi

A big lunge

Who paid: Sanofi
Who got paid: Hanmi
How much upfront: $449 million
For what: Efpeglenatide
Deal value total: $4.4 billion
When: 11/5/15
Category: Diabetes

The scoop: Two years ago, Sanofi was powerfully interested in the long-lasting diabetes drugs that belonged to South Korea’s Hanmi — a biopharma company with many irons in the fire. But while this one started out as a top-10 program, it didn’t stay that way. Sanofi bagged rights originally to efpeglenatide, a long acting insulin called LAPS-insulin115 and a combination of the two, efpeglenatide and LAPSinsulin115. Then Sanofi handed back rights on the combo and got back about half of its upfront. Sanofi also had to acknowledge that manufacturing problems would delay the start of the late-stage study of efpeglenatide from Q4 2016 to Q4 2017, underscoring the kind of setbacks that continue to bedevil the company after spending more than a year scouting a big acquisition. In diabetes, a handful of major players dominate the market space, and every time an opening is created in research, they typically all pile in to exploit it. Sanofi tried to make inroads with a major deal on the inhaled insulin Afrezza, but just got its hands burned in the process.
9
Celgene/Forma
Who paid: Celgene
Who got paid: Forma Therapeutics
How much upfront: $420 million
For what: R&D in protein homeostasis
Deal value total: $795 million
When: 4/1/14 and 8/29/17
Category: Neurodegeneration plus
The scoop: This deal started out as a transformational pact for Forma, which get $225 million to start within 2014 — with $375 million in milestones — for their work on protein homeostasis, a hot new field in drug research which explores how a dysfunction in the way a cell properly regulates proteins can trigger disease. Then last summer Celgene came back with $195 million more in cash to broaden the collaboration to include some new work on neurodegeneration, which is a field that Celgene has been slowly expanding its focus on. We don’t know much about what has been actually produced out of all this cash, but Celgene has clearly not lost interest. A 2013 deal with $200 million in prospective payouts got this relationship started.

10
Medivation/BioMarin
Who paid: Medivation
Who got paid: BioMarin
How much upfront: $410 million
For what: Talazoparib
Deal value total: $510 million
When: 8/24/15
Category: Oncology
The scoop: Our last deal today provides a clear example of how you could turn a big dollar deal into quick cash. For Medivation, the cash truck arrived with Pfizer’s logo on it, bearing $14 billion for a buyout that was centered on the prostate cancer therapy Xtandi, but certainly included big value for its experimental PARP, as then Medivation CEO David Hung had demanded in a round of hard bargaining. Pfizer’s R&D group is more than capable of bringing home the late-stage data, but this drug also faces some serious competition already on the market.