Update | Healthcare

25 June 2020

Sareum Holdings

Potential strategy in COVID-19

The pandemic presents Sareum with an unexpected opportunity to test its lead TYK2 inhibitor, SDC-1801, in COVID-19. Such a move would require external funding, but this could accelerate clinical development timelines and catalyse a substantial increase in value for the company. Meanwhile, the recent £1m fundraising allows Sareum to advance SDC-1801 towards trials for mainstream autoimmune conditions.

Sareum intends to make grant applications to explore the activity of SDC-1801 in COVID-19, where the aim would be to reduce the immune system over-reaction that has been seen in the later phase of the infection. If such grant applications are awarded, SDC-1801 could join a group of drugs – including a number of JAK inhibitors - that have been fast-tracked into trials for COVID-19 As a dual TYK2/JAK1 inhibitor, SDC-1801 could be more effective and/or better tolerated than these similar compounds in treating COVID-19.

Meanwhile, Sareum has raised £1m via an equity issue that allows it to advance SDC-1801 into clinical trials for autoimmune disease, consistent with its original business plan.

While QuotedData's model does not ascribe a value to the COVID-19 opportunity at present, the estimate of the TYK2 assets' current value has been increased to $30-50m. After modest assumptions for research and development (R&D) spending, QuotedData has assigned a fair value for Sareum in the £25–45m range (0.76–1.38p/share), with the interest in SRA-737 representing upside to the investment case that may be realised in a deal involving the licensee Sierra Oncology.

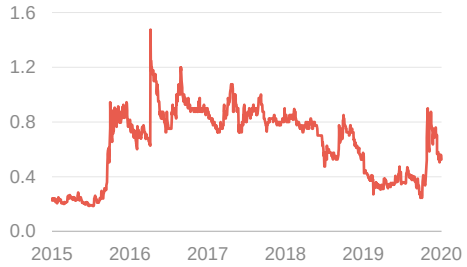
Year ended	Revenue (£m)	Profit before tax (£m)	Earnings per share (p)	Dividend per share (p)
30/06/18	0.0	(1.7)	(0.05)	0.0
30/06/19	0.0	(1.7)	(0.05)	0.0
30/06/20	0.1	(1.3)	(0.04)	0.0
30/06/21	0.0	(1.4)	(0.04)	0.0

Source: Marten & Co

Sector	Healthcare
Ticker	SAR LN
Base currency	GBP
Price	0.525p
Daily volume (1-year average)	11.5m shares
1-year high	0.900p
1-year low	0.245p
1-year performance	(8.7%)
5-year performance	13.3%
Yield	nil

Share price

Time period 23/06/2015 to 23/06/2020



Source: Bloomberg

Domicile	England & Wales
Market cap	£17.2m
Shares outstanding	3.27bn
Net cash	£1.5m

Many of the terms used in this note are explained in the glossary on the QuotedData website, which is accessed through the search box.

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Data summary

Figure 1: Sareum's R&D pipeline

Compound	Mechanism	Indication(s)	Stage	Notes
SDC-1801	TYK2/JAK1 inhibitor	COVID-19-related cytokine storm/ acute respiratory distress syndrome.	Preclinical	Potential for fast development and approval under emergency use protocols, subject to funding and completion of a controlled study.
SDC-1801	TYK2/JAK1 inhibitor	Autoimmune diseases such as psoriasis, RA, lupus, IBD and MS.	Preclinical	Undergoing dose finding/longer-term toxicology studies. IND (investigational new drug trial) planned for late 2020.
SDC-1802	TYK2/JAK1 inhibitor	solid tumours/B-cell lymphoma	Preclinical	Activity shown in models of cancer of pancreas, colon, skin and kidney and B-cell lymphomas via a novel immune-modulatory mechanism
SRA737	Chk1 inhibitor	Various solid tumours (including ano-genital cancer) in combination with low dose gemcitabine or checkpoint inhibitors.	Entering Phase II/III	Licensed to **Sierra Oncology**, although development has been suspended for strategic reasons, while Sierra seeks a partner for further development. Sareum, as the originator, holds a 27.5% economic interest in the licensing of the compound.
SAR-20293	FLT3/Aurora kinase	Acute myeloid leukaemia (AML)/ acute lymphoblastic leukaemia (ALL).	Preclinical	Licensed to an undisclosed China-based speciality pharmaceutical company. A milestone payment of c.£0.9m due if certain milestones related to oral bioavailability are achieved by the year end.

Source: Sareum, Marten & Co. RA = rheumatoid arthritis; MS =multiple sclerosis; IBD = inflammatory bowel disease.

Figure 2: TYK2 competitive landscape in autoimmune disease

Company	Compound	Target	Indications/stage	Notes
Bristol Myers Squibb	BMS-986165	TYK2	Phase III (psoriasis). Phase II (lupus, Crohn's, ulcerative colitis, psoriatic arthritis).	Phase III results due in July 2020.
Pfizer	Brepocitinib/ PF-06700841	TYK2/ JAK1	Phase II (psoriasis and atopic dermatitis) as topical and psoriatic arthritis, Crohn's, ulcerative colitis, vitiligo, lupus, hidradenitis suppurativa and alopecia areata as oral).	Positive Phase II studies in alopecia areata and psoriasis.
Pfizer	PF-06826647	TYK2	Phase 2 (psoriasis, ulcerative colitis, hidradenitis suppurativa).	
BMS	N/D	TYK2	Phase I.	
Nimbus Lakshmi	NDI-031407	TYK2	Described as clinical, "progressing towards Phase II".	BMS (Celgene) holds option.
Sareum	SDC-1801	TYK2/ JAK1	Preclinical. Targeting IND in late 2020.	Possible first indication in COVID-related cytoline storm.
TLL Pharma	TLL-018	JAK1/ TYK2	Preclinical	

Source: Marten& Co

Figure 3: Trials of JAK inhibitors in COVID related acute respiratory distress syndrome/cytokine storm.

Company	Compound	Clinical trials/notes
Lilly	Olumiant (baricitinib)	15 clinical trials, including five Phase III (inc NIAID Adaptive COVID-19 and company-sponsored 400-pt placebo controlled).
Novartis/ Incyte	Jakafi (ruxolotinib)	14 clinical trials, inc company-sponsored Phase III for COVID-related severe respiratory immune reaction and acute respiratory distress syndrome (ARDS)
CTI	pacritinib	c400-patient Phase III trial.
Pfizer	Xeljanz (tofacitinib)	Investigator-Phase II study in COVID-19 pneumonia. JAK1/3 inhibitor.
Theravance	TD-0903	Phase I in healthy volunteers. Lung-selective nebulised formulation.

Source: Marten& Co

More information is available on the company's website www.sareum.com

Investment summary

- Sareum's investment case centres on the development and out-licensing of two preclinical-stage TYK2/JAK1 inhibitors for autoimmune disease and cancer. Sareum is also one of a small number of companies with a licensable TYK2 inhibitor programme.
- Although Sareum's candidate, SDC-1801, is behind the class leaders, it has the potential to be attractive as a licensing opportunity, as the main autoimmune disorder markets it addresses are large and have historically supported multiple agents with similar mechanisms. Meanwhile, SDC-1802 could potentially be the first TYK2 inhibitor to enter clinical development for a cancer indication.
- Bristol Myers Squibb's class leader BMS-986165 has been ranked as the pharma industry's second most valuable research and development-stage asset. The compound has been calculated to have a (non-risk adjusted) net present value of $6.7bn, based on consensus sell-side analyst projections. Readouts from currently ongoing Phase III trials in psoriasis should further highlight both its own commercial potential and the opportunity for competitors with follow-on products.
- The global pandemic has become a major healthcare priority and has led to a huge industry effort to develop a vaccine, anti-virals and other therapeutic interventions. Suppressing the immune system over-reaction or "cytokine storm" that occurs in some patients is a key target for drug intervention, as this appears to cause the lung damage that is responsible for much of the mortality.
- A large, randomised study of dexamethasone in COVID-19-related cytokine storm has shown the corticosteroid to reduce mortality in ventilated COVID-19 patients and those receiving oxygen. This supports the hypothesis that suppressing this undesirable inflammatory response can improve patient outcomes.
- JAK inhibitors are an obvious candidate for addressing this aspect of the COVID-19 infection as they target the signalling that causes the hyper-immune response. Two approved JAK inhibitors - Oluminant (bariticinib, Lilly) and Jakafi (ruxolotinib, Incyte/Novartis), as well as a developmental agent, pacritinib (CTI BioPharma), have been fast-tracked into Phase III trials for COVID-19 cytokine storm. In addition, Xeljanz (tofacitinib, Pfizer) is in Phase II studies and Theravance's developmental pan-JAK inhibitor, TD-0903, is in early human safety studies and expected to move into COVID-19 patients in due course.
- As a dual TYK2/JAK1 inhibitor, SDC-1801 may be more effective if TYK2 is a better target. However, as SDC-1801 is at an earlier stage of development, it would have to offer advantages over the competing molecules for the programme to be commercially viable. SDC-1801 could nevertheless be the first TYK2 inhibitor to enter trials for this indication as neither Bristol Myers Squibb nor Pfizer have disclosed any plans yet to trial their TYK2 inhibitors in COVID-19.
- Sareum is looking for government or other funding to test its TYK2 assets in COVID-19. The UK government is, for example, providing funding to test both approved products and novel agents in COVID-19.
- Assuming such funding can be obtained, it is possible that a clinical development programme for SDC-1801 in COVID-19 could be started in patients quickly, perhaps within months of first-in-person studies (single and multiple ascending dose in healthy volunteers). This would mirror the approach Theravance has taken with TD-0903.
- If successful, a programme in COVID-19 could accelerate development timelines for the compounds more generally without compromising their commercial potential in mainstream autoimmune disease, which remains the focus of the commercial value.

- Disruption caused to healthcare systems generally by the pandemic has made it difficult to conduct clinical trials (outside of COVID-19). Hence, the key competitors, Bristol Myers Squibb and Pfizer, may have or are likely to experience some slippage in the development timelines of their respective TYK2 compounds. This means that these agents' relative lead over SDC-1801 may be reduced, compared with the pre-pandemic situation.
- Sareum has separately secured a licensing deal for its previously de-prioritised FLT-3/aurora kinase compound with an undisclosed Chinese speciality pharmaceutical company. The deal provided a modest upfront payment (~£50k), with a larger payment (£0.9m) due if certain formulation challenges can be overcome this year. If this is successful, this could contribute to Sareum's long-term value.
- Development of the Sareum/ICR-originated Chk1 inhibitor, SRA-737, by Sierra Oncology is effectively suspended, while a new partnership or sub-licensing arrangement is sought. Sierra's decision to terminate development reflected competing strategic priorities and was not a reflection on the compound *per se*.
- Sareum holds a 27.5% economic interest in the licensing deal covering SRA-737. If Sierra is unsuccessful in sub-licensing or otherwise partnering the compound, the rights revert to the licensor (CRT Pioneer Fund), possibly allowing it to be re-licensed, on different terms. The uncertainty over SRA-737's future means that it cannot be considered to contribute to Marten & Co's indicative valuation of Sarem, but represents upside to the investment case that may arise if there is a partnership. QuotedData's model has previously ascribed a value of c£20m to the interest in the compound.
- Sareum is exposed to risks normally associated with biotech company drug development, including the uncertain outcome of clinical trials, a reliance on partners and the success or failure of competing molecules. The ability to exploit the COVID-19 opportunity will be determined by whether sufficient grant funding can be sourced, as it does not have the resources to pursue this independently.
- Following its recent £1m equity issue, Sareum is relatively well financed, with funding to mid-2021. The company has not yet taken advantage of UK government funding schemes for small businesses related to the pandemic but may also be able to.
- QuotedData's model does not assign any value to Sareum for the COVID-19 opportunity, despite the potential attractiveness of the TYK/JAK1 assets. However, it has reviewed its estimate of the economic return that could be realised in a future partnership and consequently has raised its estimate of their notional value to $30-50m. It is important to recognise that a feature of the risk-adjusted valuations is that they can rise very rapidly as product(s) advance through clinical trials.
- After normal assumptions for R&D spending and overheads, QuotedData's model suggests a fair value of Sareum lies in the £25–45m range (0.76–1.38p/share). This is up to 160% above the current share price, with potential for further upside arising from any progress towards development in COVID-19 or from a resumption of development of SRA-737.

Update: Possible strategy in COVID-19

The global pandemic presents Sareum with an unexpected opportunity to examine whether its candidate, SDC-1801, can reduce the undesirable hyper-inflammatory response or “cytokine storm” that sometimes occurs in patients with COVID-19. This would depend entirely on Sareum securing grant funding, as it does not have sufficient resources to pursue the opportunity independently. Nevertheless, if funding can be obtained, such a move could accelerate the clinical development timeline of SDC-1801 and could catalyse a substantial increase in value.

One of the main targets for therapeutic intervention in COVID-19 has been the immune system reaction that can occur in some patients late in the course of the infection. This can give rise to the pneumonia-like symptoms that progress to acute respiratory distress syndrome (ARDS), a key cause of mortality. The recent success in a large, randomised study of the corticosteroid dexamethasone, in treating patients on supplementary oxygen or mechanical ventilation, suggests that suppressing this inflammatory response can improve patient outcomes.

JAK inhibitors are an obvious candidate for this, as the JAK-dependent signalling is one way to restrain the excessive cytokine signalling. Several JAK inhibitors have already been advanced into trials by cooperative or academic groups and three - Olumiant (bariticinib, Lilly), Jakafi (ruxolotinib, Incyte/Novartis) and pacritinib (CTI Biopharma) - are in company-sponsored Phase III studies for COVID-19:

Lilly is conducting a 400-patient Phase III trial of Olumiant that is expected to have results in September, the outcome of which is being closely watched as the drug has been hypothesised to have a separate direct anti-viral effect based on artificial intelligence modelling. Novartis has a similar study underway with Jakafi that is due to render results in October. Two other JAK inhibitors are, or are expected to enter, studies for COVID-19: Xeljanz (tofacitinib, Pfizer) and Theravance’s TD-0903.

Sareum’s SDC-1801, as a dual TYK2/JAK1 inhibitor, may be more effective and/or be better tolerated than the JAK1 or pan-JAK inhibitors. TYK2 (tyrosine kinase 2) is the fourth member of the Janus family (which also includes JAK1, 2 & 3), all of which transduce cytokine-mediated signals via the JAK-STAT pathway.

Focus should remain on autoimmune disease

While COVID-19 has understandable attention at the moment, it remains autoimmune indications where the commercial value primarily lies. Sareum is one of five companies developing a TYK2 inhibitor in autoimmune disease and one of perhaps just two that have compounds available for licensing.

The class leaders– Bristol Myers Squibb’s BMS-986165 and Pfizer’s brepocitinib (PF-06700841) – are in mid/late clinical stage trials (details shown in Figure 4). The key Phase III trials of BMS-986165 in psoriasis are due to provide results this year. Multiple mid-stage studies are also underway in other indications including lupus, Crohn’s and ulcerative colitis (UC).

Both brepocitinib and Sareum’s SDC-1801 have activity on JAK1, which is also a validated target in autoimmune disease, with four JAK1 products approved for rheumatoid arthritis and other autoimmune indications. Sareum continues to evaluate a potential lead indication for SDC-1801, with the choice depending on competitive and other factors. One indication known to be under consideration is lupus or lupus nephritis, the kidney damage associated with later stages of this disease.

Figure 4: Key clinical studies with the BMS-986165 and brepocitinib

Drug	Stage	N	Design	Endpoint(s)	NCT ID
BMS-986165					
plaque psoriasis	III	600	1 dose vs placebo (pbo) vs apremilast.	Co-primary: sPGA score of 0 or 1 at wk16 and PASI 75 at 16 wks.	NCT03624127 /POETYK-PSO-1
plaque psoriasis	III	1,000	1 dose level vs pbo vs apremilast) with rand. withdrawal and retreatment	Co-Primary: sPGA score of 0 or 1 and PASI 75, both at wk 16.	NCT03611751/PO ETYK-PSO-2
plaque psoriasis	III	180	Single dose vs pbo	Co-Primary: sPGA score of 0 or 1 and PASI 75, both at wk 16.	NCT04167462PO ETYK-PSO-3
Lupus	II	360	3 doses vs pbo	SLE Responder Index at wk 32	NCT03252587
Lupus nephritis	II	78	2 doses vs pbo	Complete renal response at 24 wks	NCT03943147
Crohn's disease	II	240	3 dose levels vs pbo.	Co-primary: CDAI at 12 wks and endoscopic response.	NCT03599622
Ulcerative colitis	II	120	1 dose vs pbo	Clinical Remission at wk 12	NCT03934216
Psoriatic arthritis	II	180	2 doses vs pbo and ustekinumab.	ACR20 at wk 16.	NCT03881059
brepocitinib					
SLE	II	448	3 dose levels vs pbo	SRI-4 at wk 52	NCT03845517
plaque psoriasis	II	212	7 diff. doses (some with higher induction) vs pbo.	PASI score at wk 12	NCT02969018
Psoriasis (topical)	II	240	6 doses (QD and BID) vs pbo	PASI score at wk 12	NCT03850483
Crohn's disease*	II	250	4 arms: both actives vs pbo for 12 wks, plus 52 wk OLE.	Endoscopic improvement (>3pts) at wk 12.	NCT03395184
ulcerative colitis *	II	360	12 arm: (3 doses vs pbo for each drug) for 8 and 24 wks.	Total Mayo Score (wk 8).	NCT02958865
Vitiligo*	II	330	12 arm (induction and maintenance) for 20 wks.	VASI index at wk 24.	NCT03715829
Hidradenitis Suppurativa**	II	192	4 arm (3 compounds vs pbo) for 16 wks	HiSCR response at wk 16	NCT04092452

Source: Marten & Co. Note: SLE = systemic lupus erythematosus. *Also testing PF-06651600 (JAK3i) in parallel; ** also testing PF-06650833 (IRAK4i) and PF-06651600 (JAK3i) in parallel.

SRA-737 licensee still being sought

Sierra Oncology, the license holder for the Sareum-originated SRA-737 is seeking a sub-licensee for the Chk1 inhibitor, having decided last year to discontinue active development and focus resources exclusively on another agent. Sareum holds a 27.5% interest in the licensing deal that covers the compound, as a result of an earlier arrangement with the Institute of Cancer Research and Cancer Research UK. The licensing deal, which was executed by CRT Pioneer Fund (CPF), the investment arm of CR UK, has a headline value of $328.5m plus royalties.

SRA-737 has now effectively completed two Phase I/II trials, one as a monotherapy (as a single drug by itself) and the other in combination with low-dose gemcitabine (LDG). Initial findings showed anti-tumour activity, with the combination study highlighting an attractive fast-to-market development opportunity in ano-genital cancer.

There is, however, little visibility on when or whether Sierra may be able to secure a licensing deal or other arrangement to allow development of SRA-737 to continue. If there is a protracted delay in finding a partner, CRT Pioneer Fund should be able to recover the rights allowing it to potentially re-license it itself. As a result of Sierra Oncology's decision and the uncertainty over the sub-licensing deal, QuotedData's model assumes that the asset's value is temporarily impaired.

Investment thesis

Sareum's investment proposition centres on the development and out-licensing of the two TYK2/JAK1 inhibitors for autoimmune disease (SDC-1801) and cancer (SDC-1802). Licensing R&D stage programmes such as these to larger biotech or pharmaceutical companies is a well-established business model that would be expected to generate an economic return for Sareum in the form of an upfront payment, milestones (payments triggered by future events) and royalties on sales.

Sareum also holds an economic interest in SRA-737, which is currently licensed to Sierra Oncology pending a new licensing arrangement or other partnership. Sareum has also recently option/licensed its FLT-3/aurora kinase assets to an undisclosed Chinese partner that may generate a further payment of £0.9m if certain reformulation challenges can be overcome.

QuotedData's model assumes that the TYK2/JAK1 compounds to form the core of the investment case, with upside possible from any positive development involving SRA-737 and aurora/FLT-3. Furthermore, the model does not assign any value to the COVID-19 opportunity, given this is currently at the conceptual stage.

Nevertheless, SDC-1801 has the potential to be an attractive licensing opportunity, given the scarcity of such assets and the fact that it addresses large markets that have historically supported multiple agents with similar mechanisms. We note that the value attached to the later stage competitor, BMS-986165, which has been ranked as the pharma industry's second most valuable R&D-stage asset with a non-risk adjusted net present value of $6.7bn. This was based on a review of the main pharma industry R&D programmes, based on consensus sell-side analyst projections.

QuotedData's model includes a conservative estimate of the TYK2 assets' current value, based on common industry benchmarks. It is not realistic to calculate an explicit value (based on a risk-adjusted NPV, for example), as these are highly sensitive to unknowns (such as targeted indications, timelines, probabilities of success etc). Preclinical compounds of this type typically have values in the industry upwards of $25m, based on the upfront values licensing/M&A transactions, and often much more if there are exceptional circumstances.

QuotedData's model's estimate of the assets' notional value has increased to $30-50m. This could rise rapidly if the product(s) advance through clinical trials and the assumed probability of success improves.

After modest assumptions for R&D spending, the model suggests a fair value for Sareum in the £25–45m range (0.76–1.38p/share). This suggests there is the potential for up to 160% upside at the current share price with further possible upside should there be development in COVID-19 or from a resumption of development of SRA-737 or FLT-3 aurora.

Stock catalysts

Figure 5: Potential stock catalysts

Time	Catalyst	Comment/notes
September	Results of Phase III of Olumiant in COVID-19.	Closely watched study, considered highly promising.
October	Results of Phase III of Jakafi in COVID-19.	
H2 2020	Final data publications from studies of SRA-737	
H2 2020	Phase III data on BMS-986165 in psoriasis	Likely first registration data with TYK2 inhibitor.
2020	Phase II data on brepocitinib in UC and Crohn's	Will likely determine Phase III indications
End-2020	Outcome of reformulation of FLT-3/aurora	Will determine if license is taken up.
2020/21	Potential partnering/sub-licensing deal for SRA-737	Possible return of rights if no activity.
2020	Potential IND submission for **SDC-1801**	

Source: Marten & Co

Investment sensitivities

Sareum is exposed to the risks typically associated with biotech company drug development, including the uncertain outcome of clinical trials and reliance on third parties to advance the development of licensed assets and own internal compounds. At present, a key sensitivity is the outcome of Sierra Oncology's efforts to license SRA-737 and of Sareum's grant applications for development of SDC-1801 in COVID-19.

We note that for commercial reasons a potential partner(s) for the TYK2 compounds may insist on rights to both autoimmune and cancer indications and thus it may not be possible to license the two compounds separately.

While Sareum may have strong licensing candidates, it may not be possible to license them separately. Instead, potential partner(s) may seek to license both compounds at the same time in order to maintain greater control.

The value of the TYK2 assets that may be realised in a licensing deal may be affected by the success or failure of competitors, both within the TYK2/JAK class and, to a lesser extent, for other oral molecules addressing autoimmune/inflammatory indications. In order to be commercially successful, new oral agents will likely have to show levels of efficacy that approach or match those of biological agents while offering side-effect advantages.

It is difficult to assess the level of interest on the part of potential licensees as well as the timing and outcome of licensing negotiation (disclosed terms of licensing deals in the TYK2/JAK space are summarised in the Appendix later).

Financials

Sareum reported cash at the half year end (30 December) of £1.0m, and with expenditure running at about £1.4k per year, QuotedData's model estimates Sareum's cash position at the financial year-end will be approximately £1.5m, which should provide funding to mid-2021. QuotedData's analysis of Sareum does not consider the financial results to be a major factor in the investment thesis, except in relation to the ability to fund planned future development activities. Sareum has 3.27bn shares in issue and there are no substantial or disclosable (>3%) shareholdings.

Figure 6: Income statement

Year ending Jun £'000	2016	2017	2018	2019	2020e
Revenue	123	20	0	0	0.1
EBITDA	(1,203)	354	(1,717)	(1,686)	(1,388)
Depreciation	(2)	(4)	(5)	(8)	(0)
Operating profit	(1,205)	350	(1,722)	(1,722)	(1,288)
Net financials	4	3	4	3	0
Profit before tax	(1,201)	350	(1,722)	(1,687)	(1,283)
Tax	0	153	47	230	170
Net income	(1,201)	505	(1,470)	(1,452)	(1,113)

Source: Marten & Co

Figure 7: Balance sheet

Year ending Jun £'000	2016	2017	2018	2019	2020e
Cash	1,253	2,306	1,375	919	1,481
Receivables	79	80	138	59	48
Other	155	48	254	231	311
Total current assets	1,487	2,434	1,767	1,210	1,840
Tangible assets	1	13	8	0	6
Other	475	54	41	31	23
Total fixed assets	476	67	49	31	29
Total assets	1,963	2,501	1,816	582	1,870
Accounts payable	(100)	(156)	(183)	(147)	(160)
Total current liabilities	(100)	(156)	(183)	(147)	(160)
Shareholder equity	1,864	2,346	1,633	1,094	1,710

Source: Marten & Co

Figure 8: Cash-flow statement

Year ending Jun £'000	2016	2017	2018	2019	2020e
Operating profit	(1,205)	350	(1,722)	(1,686)	(1,338)
Depreciation	2	4	5	8	0
Change in debtors	(79)	(1)	(57)	78	11
Change in creditors	100	56	28	(37)	(13)
Other	321	281	110	0	(25)
Net operating cash inflow/(outflow)	(862)	690	(1,636)	(1,516)	(1,174)
Capex	0	(16)	0	0	(6)
Tax	184	154	43	253	253
Financial income (charge)	4	3	4	4	0
Free cash flow	(674)	831	(1,589)	(1,259)	(1,124)
Net cash flow before financing	(1,271)	831	(1,589)	(1,259)	(564)
Equity issues	0	0	656	791	1,732
Net cash inflow/(outflow)	(1,271)	1,060	(933)	(464)	562

Source: Marten & Co

Appendix – JAK licensing deals

Figure 9: Licensing deal in the JAK space for cancer/autoimmune disease

Originator/ Licensor	Date	Product(s)	Indications	Stage at licensing	Notes
Gilead/Sierra Oncology	Aug-18	momelotinib	myelofibrosis	Phase III	Upfront = $3m, milestones of $195m (largely sales based) and royalties from mid-teens to high-twenties percent, although since re-negotiated to include an equity component.
Theravance/ Janssen (J&J)	Jan-18	TD-1473 + back-ups	UC and Crohn's	Phase I	Upfront = $100m. Milestones of $900m. Joint dvt/commercial in US with costs shared (67:33 to Theravance). J&J has rights ex-US.
Celgene/ Impact Biomedicines	Jan-18	federatinib	myelofibrosis	Phase III	Acquired for $1.1bn, contingent payments of $1.4bn and sales-based milestones of $4.5bn.
Nimbus/ Celgene	Nov-17	Tyk2	N/A	Preclin	Celgene acquires option to TYK2 and STING antagonist (also preclin). Financial terms not disclosed.
Galapagos/ Gilead	Dec-15	filgotinib	RA, Crohn's, UC, AS; PsA, Lupus, Sjogren's; uveitis	Positive Phase II in RA & Crohn's	Upfront = $300m, $425m equity invest at 20% premium. Milestone payments of up to $1.35bn and tiered royalties starting at 20% and a profit split in co-promotion territories.
Rigel/Aclaris Therapeutics	Sept-15	ATI-501/2	alopecia areata/ dermatology	Preclin	Upfront = $8m, milestone payments of up to $90m and tiered royalties on sales.
CTI Biopharma/ Baxter	Nov-13	pacritinib	myelofibrosis	Phase III	Upfront = $30m and $30m equity investment, plus milestones of up to $112m. Rights returned by Baxalta after its acquisition by Shire.
Gilead/YM Biosciences	Dec-12	momelotinib	myelofibrosis	Phase I/II	Acquired for $385m, net of cash.
Astellas/J&J	Oct-12	perfectinib	RA	Phase II	Upfront = $65m for global, ex-Japan rights. Milestones of $880m and double-digit royalty. Now discontinued by J&J.
Galapagos/ Abbott (now Abbvie)	Feb-12	filgotinib	RA	Phase II in RA underway	Upfront = $150m, with option to license on completion of RA Phase II trials for $200m, with milestone payments of $1.0bn and tiered double-digit royalties. AbbVie subsequently declined option to licence.
Rigel Pharma/ AstraZeneca	Feb-10	fostamatinib disodium	RA	Phase II in RA completed.	Upfront = $100m. $345m in R&D milestones, $800m in sales-related milestones and double-digit royalties on sales. Oral SYK inhibitor. Rights returned by AZ and discontinued in RA. Since approved for ITP (as Tavalisse).
Incyte/Novartis	Nov-09	ruxolitinib	myelofibrosis	Phase III	Upfront = $150m plus initial $60m milestone for ex-US rights for ruxolitinib, up to $1.1bn in R&D and sales milestones plus double-digit royalty. Deal also provides global rights to capmatinib (a cMET inhibitor.
Cytopia/'YM Biosciences	Oct-09	momelotinib	myelofibrosis	Entering Phase II	Acquisition for C$14m in stock.

Source: Marten & Co.

Previous publications

Readers interested in further information about Sareum may wish to read QuotedData's previous notes (details are provided in Figure 10 below). You can read the notes by clicking on them in Figure 10 or by visiting QuotedData.com.

Figure 10: Marten & Co. previously published notes on Sareum

Title	Note type	Date
Tyking the boxes	Initiation	7 November 2018
Key '737 data coming up	Update	7 March 2019
Tyking over… nicely	Annual overview	10 December 2019

Source: Marten & Co.

QuotedData

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