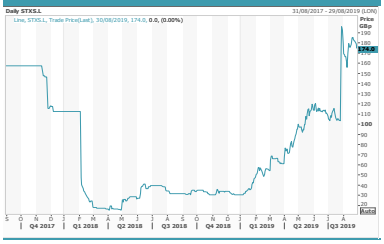
Pharmaceuticals & Biotechnology



Source: Refinitiv

Market data	
EPIC/TKR	STX
Price (p)	178.2
12m High (p)	202
12m Low (p)	27
Shares (m)	117.2
Mkt Cap (£m)	208.8
EV (£m)	199.2
Free Float*	33%
Market	AIM

**As defined by AIM Rule 26*

Description

Shield Therapeutics (STX) is a commercial-stage pharmaceutical company delivering innovative specialty pharmaceuticals that address patients' unmet medical needs, with an initial focus on anaemia associated with renal and gastrointestinal disorders.

Company information

CEO	Carl Sterritt
CFO (Interim)	Tim Watts
Chairman	James Karis

+44 207 186 8500

www.shieldtherapeutics.com

Key shareholders

Directors	9.0%
W. Health	47.8%
MaRu AG	10.7%
R. Griffiths	6.8%
C. Schweiger	4.8%
USS	4.4%

Diary

4Q'19E	Accrufer deal
Apr'20	2019 final results
Mid-2020	Accrufer launch

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SHIELD THERAPEUTICS

FDA approval ushers in a new era for Shield

STX is a commercial-stage pharmaceutical company delivering specialty products that address patients' unmet medical needs, with an initial focus on treating iron deficiency (ID) with Feraccru®/Accrufer®. FDA approval of Accrufer with a broad label in the US opens up a current market worth over $1bn in intravenous (IV) iron alone. This event will transition the company from the early growth stage illustrated by its 2019 interim results into a global company by 2020. STX is in ongoing discussions with a number of potential partners for US commercialisation – a deal that represents the next major valuation inflection point.

- **Strategy:** STX's strategy is to out-license the commercial rights to its products to partners with marketing and distribution expertise in target markets. These deals allow STX to retain its intellectual property (IP) and to keep investing in its R&D pipeline, while benefiting from immediate and long-term value.
- **Interims:** Results for 1H'19 were broadly as expected, with royalties of £0.3m received from Feraccru sales in Europe, where the product is launched in England and Germany. At £6.6m, cash on 30 June 2019 was slightly under forecasts; however, even in the absence of a US deal, STX's cash runway is into 2020.
- **Valuation:** Following FDA approval of Accrufer, our sum-of-the-parts valuation was increased to £208m/178p. Minor adjustments following the interims have increased this to £221m/189p. The US commercial deal will be the next major inflection point, when we will upgrade our model to allow for the agreed deal terms.
- **Risks:** All drug companies carry development risk. However, the risks with STX are limited because of Feraccru/Accrufer's simplicity and clinical profile. Given the FDA approval, the main risk is achieving the most appropriate commercial partner and executing on its global commercialisation strategy.
- **Investment summary:** The approval of Accrufer reinforces our view that STX is at an exciting juncture. It has delivered on all goals set at the time of its IPO in 2016. Feraccru/Accrufer has been validated by regulatory approval in both the EU and the US, and the commercial deal in Europe looks set to be repeated in the US. Announcement of its commercial partner, together with the terms of any deal, represent the next valuation inflection point.

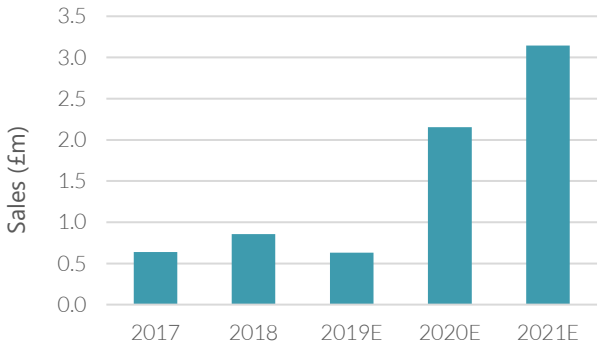
Financial summary and valuation

Year-end Dec (£m)	2017	2018	2019E	2020E	2021E
Gross revenues	**0.64**	**11.88**	**2.93**	**2.15**	**3.15**
Sales	0.64	0.86	0.63	2.15	3.15
R&D	-4.71	-4.30	-3.31	-4.64	-3.89
Other income	0.00	11.03	2.30	0.00	0.00
EBITDA	-18.48	-2.47	-5.45	-9.19	-8.68
Underlying EBIT	-18.90	-3.26	-6.24	-9.98	-9.47
Reported EBIT	-20.95	-5.17	-8.15	-11.89	-11.38
Underlying PBT	-18.91	-3.26	-6.24	-10.02	-9.51
Statutory PBT	-20.99	-5.16	-8.14	-11.93	-11.42
Underlying EPS (p)	-15.58	0.09	-4.49	-7.96	-7.62
Statutory EPS (p)	-17.43	-1.55	-6.12	-9.58	-9.25
Net (debt)/cash	13.30	9.63	6.20	-1.27	-8.46

Source: Hardman & Co Life Sciences Research

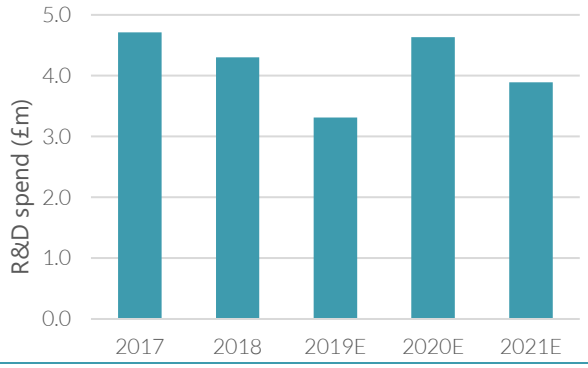
Disclaimer: Attention of readers is drawn to important disclaimers printed at the end of this document

Sales



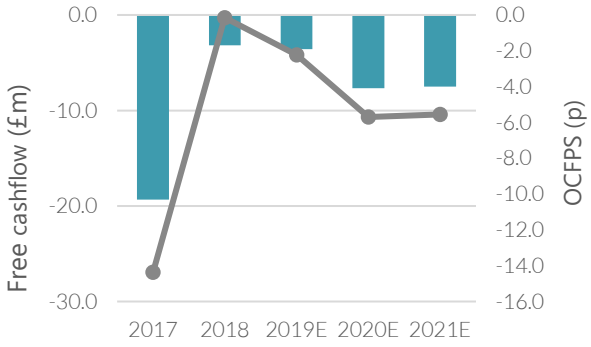
- From 2019E, sales simply reflect the royalties derived from Feraccru/Accrufer
- The drop in 2019E sales reflects the transition from direct selling by STX to royalties from Norgine in 4Q'18
- Accelerated growth expected in 2020 is due to launches in additional European countries and the US
- Out of the royalty stream, STX has to bear the manufacturing costs of Feraccru for supply to Norgine

R&D investment



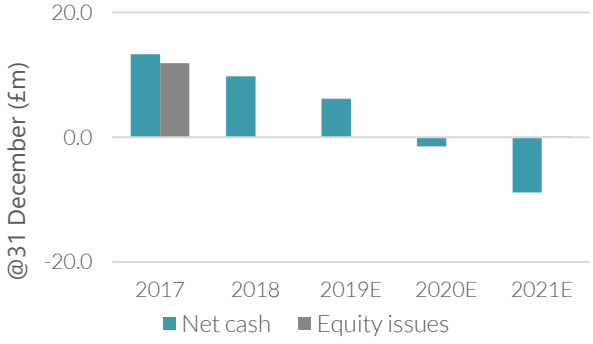
- R&D spend is expected to increase in 2020, with the initiation of the large Feraccru Phase III paediatric study
- Spend in 2017 and 2018 reflected investment in the AEGIS-CKD and AEGIS-H2H studies
- Future R&D investment timing is flexible on available resources, but it could include progression of the phosphate assets or development towards a once-a-day dose of Feraccru

Free cashflow and operating cashflow per share (OCFPS)



- On current forecasts, STX has a cash runway into 2020; a US commercialisation deal is expected within the next 12 months, which would significantly alter this situation
- STX is forecast to achieve stable positive cashflows once substantial royalties are received from Feraccru/Accrufer sales across both Europe and the US

Net cash/(debt) and equity issues



- At IPO in 2016, STX raised £32.5m gross (£30.1m net), which was boosted in 2017 by a Placing of new Ordinary shares to raise £12.5m gross (£11.9m net)
- The commercial deal with Norgine greatly enhanced STX's cash position, with the £11.0m upfront payment leaving cash on 31 December 2018 at £9.8m.
- Given the scheduled paediatric study, STX will require more funds in the future, which could come from one, or a combination, of equity, debt or licensing/distribution deals

Source: Company data, Hardman & Co Life Sciences Research

2019 interim results

Key features

Financials

- **Gross revenue:** Reported revenue (group sales and other income) of £2.62m in the six months to end-June 2019 included a €2.5m/£2.2m development milestone from Norgine following successful completion of the Phase IIIb AEGIS head-to-head (H2H) study in March, and a small milestone of £0.1m from Ewopharma AG (EWO) on the expansion of Feraccru's label in Switzerland.
- **Sales:** Royalties derived from Norgine's sales of Feraccru in Europe totalled £0.32m, in line with our forecasts.
- **SG&A:** As a virtual company, STX's administration costs are relatively slim. The 54% decline on the comparable period reflects a new baseline following disbanding of the commercial team and associated restructuring costs in 1Q'18.
- **R&D:** The 41% drop in R&D costs in 1H'19 reflects both the conclusion of the AEGIS-H2H study during 1H'19 and the falling away of the costs of the chronic kidney disease (CKD) trial in 1H'18. At -£1.27m, R&D costs were lighter than forecast due to the delayed start to the Phase III paediatric trial, resulting from the slower-than- anticipated re-formulation stage.
- **EBITDA:** The lower-than-expected operating costs fell straight through to deliver a stronger EBITDA loss of -£1.0m. In addition, Hardman & Co has revised its accounting of share-based costs (£0.26m in 1H'19), which are now included in the underlying performance; excluding this change, 1H'19 EBITDA was £1.48m better than forecast.
- **Cash:** At 30 June 2019, STX had a cash position of £6.6m and no debt. Based on a first-half cash burn of -£3.6m, the company appears to currently have sufficient funding into the second half of 2020.

Interim results – actual vs. forecasts

Half-year to June (£m)	1H'18 actual	1H'19 actual	Growth %	1H'19 forecast	Delta Δ
Gross revenue (as reported)	0.50	2.62	423%	2.50	+0.12
Sales	0.43	0.32	-27%	0.30	+0.02
COGS	-0.13	-0.31	139%	-0.34	+0.03
SG&A (underlying)	-5.02	-2.29	-54%	-3.23	+0.94
R&D	-2.15	-1.27	-41%	-1.38	+0.11
Other income	0.06	2.30	3733%	2.18	+0.12
Underlying EBIT*	-6.81	-1.52	-78%	-2.82	+1.30
EBITDA*	-6.56	-1.00	-85%	-2.22	+1.22
Underlying EPS (p)	-5.81	-0.83	-86%	-1.90	+1.07
Net cash/(debt)	3.51	6.61	88%	7.37	-0.76

**Accounting change: now includes share-based costs*
Source: Hardman & Co Life Sciences Research

Operations

Commercialisation in Europe

We discussed in detail STX's strategy and operational progress in our recent initiation note, *All in the execution*, published in May 2019[1]. The major development in the 2019 interim period was the start of marketing of Feraccru in the UK and Germany by STX's commercial partner Norgine.

[1] https://www.hardmanandco.com/research/corporate-research/all-in-the-execution/

However, negotiations with Clinical Commissioning Groups (CCGs) in England have taken time (there are ca.200 CCGs, each requiring individual agreements) and, as a result, UK sales acceleration is expected in 2020. Sales of Feraccru in Germany were strong, where Feraccru is reimbursed nationally. Norgine has continued with pricing and reimbursement activities in additional European markets such as France, which should lead to a full data package and dossiers being ready for submission to payers in 2020.

Clinical and regulatory progress

Additional developments in the period that augur well for near-term European sales growth were the expansion of Feraccru's label by Swiss Medic in Switzerland to include treatment of general iron deficiency (ID), and the very positive results from the AEGIS-H2H study (see initiation note[1] for a discussion). Once the data, which demonstrate non-inferiority to leading IV iron therapies, are publicly released in October at the United European Gastroenterology Week meeting, Norgine will have excellent promotional material for marketing to specialist clinicians and in reimbursement negotiations.

Crucially, the H2H data support marketing of Feraccru for treatment of an expanded market – as a first-line treatment, rather than in only those patients for whom existing IV or oral therapies are inadequate or unfavourable.

Post-period: approval in the US

Timing of US launch and sales is dependent on signing a commercial partner…

…and the time needed to complete launch preparations, e.g. manufacturing of initial batch supplies with identification marks

The US FDA approved Accrufer for treatment of ID in adults in July 2019. This broad label is an excellent achievement for STX, opening up the major US market, currently worth over $1bn in net sales of IV iron therapies alone. As part of the post-approval requirements, STX has committed to performing food effect and drug interaction studies, in addition to the planned paediatric study with a protocol that meets both EMA and FDA requirements. The paediatric study will use a liquid formulation; with formulation work taking longer than expected, this study is now due to begin recruitment in 2020, rather than 2H'19.

There are a few steps that need to be completed before Accrufer is formally launched in the US. In the first instance, STX needs to conclude a licensing deal with a distribution partner(s). Discussions have ramped up following the approval, with STX waiting until the FDA decision and a de-risked product to select a partner. The achievement of a broad label may have altered slightly the list of potential partners, e.g. to larger organisations with more extensive sales and marketing capabilities; however, management does still appear confident of a deal around the end of 2019. It is difficult to guess the timing of a launch by a partner organisation; however, we estimate launch to take place around the middle of 2020, based on a deal being signed around the end of this year and the time needed for completion of launch preparations (e.g. identification marks (company logo) on the capsules)).

Accrufer – next steps

Date	Event
25 Jul'19	FDA approval
4Q'19	Conclude deal with US distribution partner(s)
1Q'20	Complete manufacturing
Mid-2020	Formal US launch

Source: Hardman & Co Life Sciences Research

Financials and investment case

Valuation update

Regulatory de-risking in the US added £14m to our valuation, or 12p per share

Rolling forward the model and bringing US royalties into 2020 add further £13m

The next major valuation inflection point will be signing the US commercial partner

We increased our sum-of-the-parts valuation from £194m to £208m following FDA approval of Accrufer in July 2019. As noted, the next major inflection point is likely to be the conclusion of a licensing deal with a US distribution partner. Although we are certain that such a deal will take place, the timing and composition of any deal is extremely difficult to predict, and, as such, nothing has been included in our forecasts at this point.

Following the announcement of interim results, the following adjustments have been made:

- The model has been rolled over by one year, with 2019 becoming the first forecast year, resulting in a positive adjustment.
- The FY'19E cash position has been updated, which has a small negative adjustment.
- The original model had first royalties for US sales of Accrufer being introduced in fiscal 2021. Given that commercial discussions are likely to conclude around the end of 2019, we have introduced a small royalty payment in 2020 forecasts.

Sum-of-the-parts valuation	
	£m
Feraccru royalty stream – risk-adjusted NPV	215
PT20 royalty stream – risk-adjusted NPV	0.12
Net cash/(debt)	6.24
Market capitalisation	221
Shares in issue (m)	117.2
Valuation/share (p)	189

Source: Hardman & Co Life Sciences Research

Guide to a potential deal

Prudent to reassess valuation model following announcement of a US commercial partner

As stated above, both the timing and the quantum of a US upfront payment are subject to considerable uncertainty. However, in our opinion, given the size of the commercial opportunity for a regulatory de-risked proposition in the US market, the payment is likely to be considerably greater than the £11m that STX received from Norgine for similar European rights. Management is also likely to take into consideration the balance between the upfront payment and the long-term royalty rate – the smaller the upfront, the larger the royalty that can be commanded. In addition, the size of the upfront could be boosted if the deal included US rights to PT20.

The magnitude of ongoing licensing fees may also depend partly on the partner's approach to launch: an initial focus on specialist care, in line with STX's existing pricing and commercialisation strategy, could temper the upfront but be followed by higher future sales milestones on expansion into primary care.

Our current DCF model remains conservative based on the use of Feraccru/Accrufer for specialist treatment of IDA in IBD and CKD patients only, unchanged from our initiation note[1]. Expansion into the general ID market would increase our valuation.

In addition, management is looking at signing a commercialisation deal with a Chinese partner, for final development activities and distribution in China, before the end of fiscal 2019. However, this will not have the benefit of Feraccru being de-risked by the Chinese FDA prior to signing.

Given all these unknowns, we feel that it is prudent to reassess the entire valuation model following the announcement of the US commercial partner, when many of the deal terms are likely to be divulged.

Changes to forecasts

Very few changes to estimates following interims

With the exception of R&D spend, we have not altered our published forecasts following these interim results. The modest delay to the paediatric study has shifted some cost from 2019 into 2020. In addition, STX looks set to eliminate capitalised R&D spend in 2020 and beyond, and to write off all investment in the year in which it is incurred, bringing it into line with normal industry practice.

Given that a US commercial deal looks set to be concluded around the end of 2019, a small royalty from US sales has been introduced from the second half of 2020. Until the US partner is known, we are taking a conservative approach to the likely timing of US launch and sales trajectory for Accrufer. This leaves considerable scope to increase forecasts when there is more certainty about the deal terms. Consistent with our usual approach, no potential upfront or milestone payments from this or any other future deals (e.g. entry to the Chinese market) have been included in forecasts. In the highly unlikely event that a partnership deal for US commercialisation is not achieved in the next 12 months, we anticipate that STX will require additional funding by 2H'20.

As shown in the following tables, we have introduced our 2021 forecasts for the first time.

Profit & Loss

- **Sales:** Prior to 2018, Feraccru sales were direct product sales made by STX. In 2018, sales represented a combination of direct selling by STX and royalties from Norgine's activities in Europe. In 2019 and beyond, sales are only royalties from commercial partners.
- **Other income:** We do not include potential future upfront or milestone payments in our forecasts at this time, due to the uncertainty of both their timing and magnitude. There is potential for an upfront of at least £20m on the signing of a US partner, in either late 2019 or early 2020.
- **COGS:** COGS represent the third-party contract manufacturing costs, together with the 5% pay-away/net sales royalty to Vitra. Given that STX is not recording product sales, the traditional calculation of gross margin is not relevant for STX.
- **SG&A:** SG&A simply reflect the corporate overhead, given that STX does not have any direct sales activity itself. At this point, no allowance has been made for the small legal cost regarding patent challenges.
- **R&D:** Management is maintaining flexibility with respect to R&D to bring the phosphate products through clinical trials. Short term, it is accruing the costs of the Feraccru/Accrufer formulation work, beginning the paediatric Phase III trial in 1Q'20. After 2019, management has decided to cease capitalised R&D, and will write off all R&D spend in the year in which it is incurred.

Profit & Loss account					
Year-end Dec (£m)	2017	2018	2019E	2020E	2021E
GBP:EUR	1.14	1.14	1.14	1.14	1.14
GBP:USD	1.29	1.31	1.31	1.31	1.31
Gross revenues	0.64	11.88	2.93	2.15	3.15
Sales	0.64	0.86	0.63	2.15	3.15
COGS	-0.16	-0.31	-0.40	-1.29	-1.82
Gross profit	0.48	0.55	0.23	0.86	1.32
SG&A (underlying)	-14.12	-9.52	-4.45	-5.20	-5.89
Share-based costs	-0.56	-1.01	-1.01	-1.01	-1.01
R&D	-4.71	-4.30	-3.31	-4.64	-3.89
Other income	0.00	11.03	2.30	0.00	0.00
EBITDA	-18.48	-2.47	-5.45	-9.19	-8.68
Depreciation	-0.01	-0.01	-0.01	-0.01	-0.01
Amortisation	-0.42	-0.79	-0.79	-0.79	-0.79
Underlying EBIT	**-18.90**	**-3.26**	**-6.24**	**-9.98**	**-9.47**
Exceptional items	-2.05	-1.90	-1.90	-1.90	-1.90
Statutory EBIT	-20.95	-5.17	-8.15	-11.89	-11.38
Net interest	0.00	0.01	0.01	-0.04	-0.04
Forex gain/loss	-0.04	0.00	0.00	0.00	0.00
Underlying PBT	**-18.91**	**-3.26**	**-6.24**	**-10.02**	**-9.51**
Extraordinary items	0.00	0.00	0.00	0.00	0.00
Statutory PBT	-20.99	-5.16	-8.14	-11.93	-11.42
Tax payable/credit	1.41	3.36	0.99	0.70	0.58
Underlying net income	**-17.50**	**0.10**	**-5.24**	**-9.33**	**-8.93**
Statutory net income	-19.59	-1.80	-7.15	-11.23	-10.83
Ordinary 1.5p shares:					
Period-end (m)	116.43	116.43	117.19	117.19	117.19
Weighted average shares (m)	112.36	116.43	116.81	117.19	117.19
Fully-diluted (m)	112.36	116.53	117.01	117.49	117.59
Underlying basic EPS (p)	**-15.58**	**0.09**	**-4.49**	**-7.96**	**-7.62**
Statutory basic EPS (p)	-17.43	-1.55	-6.12	-9.58	-9.25
Underlying fully-dil. EPS (p)	-15.58	0.09	-4.48	-7.94	-7.59
Statutory fully-dil. EPS (p)	-17.43	-1.55	-6.11	-9.56	-9.21
DPS (p)	0.0	0.0	0.0	0.0	0.0

Source: Hardman & Co Life Sciences Research

Balance sheet

- **Cash position:** The commercial deal with Norgine significantly boosted STX's cash position towards the end of fiscal 2018, with the £11.0m upfront payment leaving cash on 31 December 2018 at £9.8m. 1H'19 cash of £6.6m was boosted by the €2.5m/£2.2m H2H study milestone from Norgine.
- **Net cash/(debt):** Although our forecasts indicate that the cash position turns negative by the end of fiscal 2020, no allowance has been made at this point for upfront payments on signing commercial deals for the US and China. Both of these have the potential to be quite significant, dramatically changing the status of the balance sheet and any need for capital.
- **Asset-light:** STX has a virtual business model and the associated asset-light structure. We have introduced a 'lease liabilities' line to reflect the changes related to accounting of leasehold premises introduced by IFRS 16.
- **Intangible assets:** £1.2m of R&D was capitalised in the interim period, the majority of which was related to the AEGIS-H2H study, with a small sum related to improving IP. From 2020, capitalised R&D is expected to be negligible.

Balance sheet					
@31 Dec (£m)	**2017**	**2018**	**2019E**	**2020E**	**2021E**
Shareholders' funds	41.21	40.43	33.31	22.08	11.24
Cumulated goodwill	0.00	0.00	0.00	0.00	0.00
Total equity	41.21	40.43	33.31	22.08	11.24
Share capital	1.75	1.75	1.76	1.76	1.76
Reserves	39.46	38.68	31.55	20.32	9.49
Provisions/liabilities	0.26	0.00	0.00	0.00	0.00
Deferred tax	0.00	0.00	0.00	0.00	0.00
Lease liabilities	0.14	0.15	0.15	0.15	0.15
Long-term loans	0.00	0.00	0.00	0.00	0.00
Short-term debt	0.00	0.00	0.00	0.00	0.00
less: Cash	13.30	9.78	6.34	-1.12	-8.31
less: Deposits	0.00	0.00	0.00	0.00	0.00
less: Non-core investments	0.00	0.00	0.00	0.00	0.00
Invested capital	**28.31**	**30.80**	**27.11**	**23.35**	**19.70**
Fixed assets	0.15	0.16	0.15	0.15	0.14
Intangible assets	29.96	30.96	31.18	30.39	29.61
Inventories	0.13	0.11	0.08	0.28	0.41
Trade debtors	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Other debtors	*1.57*	*1.03*	*1.03*	*1.03*	*1.03*
Tax liability/credit	*0.00*	*1.50*	*3.36*	*0.99*	*0.70*
Trade creditors	*-1.80*	*0.00*	*0.00*	*0.00*	*0.00*
Other creditors	*-1.70*	*-2.95*	*-8.69*	*-9.49*	*-12.18*
Debtors less creditors	-1.93	-0.42	-4.30	-7.47	-10.45
Invested capital	**28.31**	**30.80**	**27.11**	**23.35**	**19.70**
Net cash/(debt)	**13.30**	**9.63**	**6.20**	**-1.27**	**-8.46**

Source: Hardman & Co Life Sciences Research

Cashflow

- **General:** Given that STX outsources most of its operational activities, the cashflow statement is driven by the underlying EBIT and licensing deals.
- **Milestones:** Positive results from the AEGIS-H2H Feraccru study triggered a €2.5m/£2.2m development milestone from Norgine, included in 2019's 'other income', along with £0.1m from EWO on label expansion in Switzerland.
- **Capitalised R&D:** Until now, STX has capitalised R&D spend on products that have marketing approval. From fiscal 2020, STX will write off all R&D spend in the year in which it is incurred, bringing it into line with normal industry practice. Therefore, this cashflow cost (ca.£1.0m p.a.) drops away after 2019, but the equivalent spend has been added to the previous R&D investment being written off through the P&L account.
- **US licensing deal:** All forecasts exclude potential 'other income', including from the licensing of Accrufer for the US market, the timing and quantum of which are difficult to predict. This is likely to be considerably higher than that received from Norgine for European rights, given the broad approval and market size.
- Cash runway: Given ongoing R&D for Feraccru/Accrufer, such as the scheduled paediatric study and potential development of the phosphate assets, STX will require additional funds from around 2H'20. This could be from equity, debt or licensing/distribution deals, or a combination of these.

Cashflow					
Year-end Dec (£m)	2017	2018	2019E	2020E	2021E
Underlying EBIT	-18.90	-3.26	-6.24	-9.98	-9.47
Depreciation	0.01	0.01	0.01	0.01	0.01
Amortisation	0.01	0.79	0.79	0.79	0.79
Share-based costs	0.42	1.01	1.01	1.01	1.01
Inventories	*0.29*	*0.02*	*0.03*	*-0.20*	*-0.13*
Receivables	*-0.17*	*0.54*	*0.00*	*0.00*	*0.00*
Payables	*-0.41*	*-0.95*	*0.00*	*0.00*	*0.00*
Change in working capital	-0.29	-0.40	0.03	-0.20	-0.13
Exceptionals/provisions	0.10	0.14	0.14	0.14	0.14
Disposals	0.00	0.00	0.00	0.00	0.00
Other	0.11	-0.13	0.00	0.00	0.00
Company op. cashflow	**-17.99**	**-1.85**	**-4.27**	**-8.24**	**-7.66**
Net interest	0.00	0.00	0.01	-0.04	-0.04
Tax paid/received	1.99	1.86	2.00	0.99	0.70
Operational cashflow	**-16.15**	**-0.32**	**-2.45**	**-7.47**	**-7.19**
Capital expenditure	0.00	0.00	0.00	0.00	0.00
Capitalised R&D	-3.17	-3.00	-1.01	0.00	0.00
Sale of fixed assets	0.00	0.00	0.00	0.00	0.00
Free cashflow	**-19.33**	**-3.32**	**-3.46**	**-7.47**	**-7.19**
Dividends	0.00	0.00	0.00	0.00	0.00
Acquisitions	-0.24	-0.35	0.00	0.00	0.00
Disposals	0.00	0.00	0.00	0.00	0.00
Other investments	0.00	0.00	0.00	0.00	0.00
Cashflow after investments	**-19.56**	**-3.67**	**-3.46**	**-7.47**	**-7.19**
Share repurchases	0.00	0.00	0.00	0.00	0.00
Equity issues	11.88	0.00	0.02	0.00	0.00
Currency effect	0.00	0.00	0.00	0.00	0.00
Loans/cash acquired	0.00	0.00	0.00	0.00	0.00
Change in net debt	**-7.68**	**-3.67**	**-3.43**	**-7.47**	**-7.19**
OCFPS (p)	-14.38	-0.28	-2.10	-6.37	-6.13
Opening net cash	20.98	13.30	9.63	6.20	-1.27
Closing net cash	**13.30**	**9.63**	**6.20**	**-1.27**	**-8.46**

Source: Hardman & Co Life Sciences Research

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