13 May 2010

Paion

Year End	Revenue (€m)	PBT* (€m)	EPS* (c)	DPS (c)	P/E (x)	Yield (%)
12/08	3.2	(12.8)	(59.3)	0.0	N/A	N/A
12/09	1.5	(13.2)	(52.5)	0.0	N/A	N/A
12/10e	3.5	(10.3)	(40.6)	0.0	N/A	N/A
12/11e	1.5	(12.8)	(50.7)	0.0	N/A	N/A

Note: *PBT and EPS are normalised, excluding goodwill amortisation and exceptional items.

Investment summary: Cash runway improved

Paion has secured a €15m three year equity facility agreement, partial use of which would extend its cash runway into mid-2012. This removes the pressure to find additional funding (in the absence of new deals) ahead of completion of Phase III desmoteplase studies by Lundbeck in 2011, an event that, if successful, would trigger substantial milestones. It also puts Paion in a stronger position with respect to its partnering discussions for iv opioid M6G and short-acting sedative CNS-7056, both late-stage pipeline assets that are key to the Paion investment case.

Additional funding for CNS-7056 and corporate purposes

The Commerce Court Small Cap Value Fund (CCSCVF – managed by Acqua Capital Management) equity facility provides flexible long-term funding and will be used to strengthen Paion's cash position, funding both the 160-pt Phase IIb trial of CNS-7056 (due to start in May) and general corporate needs. It is structured so that Paion has flexibility and control regarding when shares are issued (at a 5% discount) and additional funds are drawn down, and permits Paion to set a floor price.

Cash to mid-2012, and potential deals to come

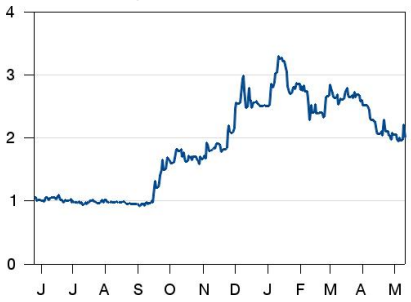
Paion has sufficient cash to mid-2012; Q110 cash of €19.2m is likely to be boosted by share issuance under the CCSCVF facility and the $1.5m of Ono and Acorda milestones to be booked in Q2. Licensing of M6G and CNS-7056 may extend the runway further, ahead of the next desmoteplase milestones anticipated in H211.

Valuation: Risk-adjusted NPV of €76m, EV of €40m

Conservatively valuing Paion's three most advanced programmes, and taking an extremely cautious view of desmoteplase (only a 35% success probability, despite it being in Phase III, due to the high historic failure rate of stroke projects), our rNPV approach values Paion at €76m (including 2010e net cash). This compares with a current EV (market cap less net cash) of €40m, and suggests that the market is attributing a c 30% probability of success to desmoteplase.

Price	€2.13
Market Cap	€52m

Share price graph



Share details

Code	PA8
Listing	Frankfurt
Sector	Pharmaceuticals & Biotech
Shares in issue	24.6m

Price

52 week	High	Low
	€3.38	€0.89

Balance Sheet as at 31 March 2010

Debt/Equity (%)	N/A
NAV per share (€)	0.68
Net cash (€m)	12.4

Business

Paion is a biopharmaceutical company specialising in the development of CNS products. The company has six NCEs in its R&D portfolio, with the lead programme desmoteplase partnered with Lundbeck.

Valuation

	2009	2010e	2011e
P/E relative	N/A	N/A	N/A
P/CF	N/A	N/A	N/A
EV/Sales	N/A	N/A	6.4
ROE	N/A	N/A	N/A

Revenues by geography

UK	Europe	US	Other
0%	100%	0%	0%

Analysts

Lala Gregorek 020 3077 5736
Robin Davison 020 3077 5735
healthcare@edisoninvestmentresearch.co.uk

Paion is a research client of Edison Investment Research Limited

Update: Facility and milestones to extend cash runway

Paion's investment case continues to hinge on securing development partners for two of its late-stage pipeline programmes: the short-acting sedative CNS-7056 (pINN: remimazolam) and the iv opioid M6G, the latter being possible this year. A global (ex-Japan) partnership for CNS-7056 could, in our view, have attractive economics and secure Paion's funding position beyond the completion of Phase III studies of desmoteplase by Lundbeck in 2011, an event that, if successful, would also trigger substantial milestones.

Paion's Q110 net cash position of €12.4m provides sufficient funding into mid-2011 in the absence of additional licensing deals or milestones; however, the company has extended this cash runway into mid-2012 assuming partial use of a newly secured three year €15m equity facility agreement with CCSCVF, managed by Acqua Capital Management. This facility will be used to strengthen Paion's cash position, importantly providing the resources to fund the imminent CNS-7056 Phase IIb trial. Under the facility Paion is permitted to issue new shares at a 5% discount to the daily volume weighted average price over the preceding five days in multiple tranches (between €150k-€1.3m in value) to CCSCVF in exchange for a cash consideration.

Paion's cash position will be further supplemented by the $2m in recently triggered milestones which either has been received, or will be received in Q210. The milestones are comprised of $1m from Ono Pharmaceutical on enrolment of the first patient in the Japanese Phase I study of CNS-7056, and an aggregate $1m from Acorda Therapeutics on the IND filing ($0.5m) and acceptance ($0.5m) for GGF2 in heart failure. Further milestone payments from these partners are anticipated from 2011 onwards, while significant pre-registration milestones of €38m are expected from Lundbeck for desmoteplase in 2011-12, with a further €25m due after approval in addition to double-digit royalties on sales. The first Phase III desmoteplase data should report in 2011.

R&D focus on CNS-7056 and partnering focus on M6G

Paion's current R&D efforts are concentrated on the further development of CNS-7056; and the majority of R&D spending is focused on funding the 160-patient Phase IIb procedural sedation trial in colonoscopy patients, which, now that FDA feedback has been received, is due to start in May. This US multi-centre, double-blind, parallel group trial will evaluate the safety, efficacy and PK of three different doses of CNS-7056 compared with gold standard drug, midazolam. This trial should define the optimal dose for the Phase III programme[1]; with recruitment conservatively estimated to take nine months (taking into account a potential summer lull), read out is anticipated during H111.

Paion's investment in the Phase IIb trial should ensure that CNS-7056 is a Phase III-ready asset in 2011, which should increase the attractiveness of the drug to potential partners. Management had previously intimated that while some prospective partners view the Phase IIb study as fine tuning of the dose for Phase III trials (which would be funded by a partner), others would prefer to see Phase IIb data prior to taking the decision to partner. At the Q1 analyst call, management confirmed that ex-Japan partnering discussions are ongoing, in preparation for an auction post-Phase IIb read out.

[1] The Phase III programme will include a colonoscopy trial vs propofol, an endoscopy trial vs midazolam, and a short procedures study evaluating use in procedures such as trauma, limb resetting and wound dressing.

In addition to the Phase IIb study, the CNS-7056 development programme also includes interaction trials and paediatric trials which may be carried out by Paion. Paion will also have full access to the clinical data generated by Japanese partner Ono, which focuses on a second indication (induction and maintenance of anaesthesia) and will supplement the CNS-7056 safety database.

M6G is already a Phase III-ready asset, with sufficient clinical material available for the next trials: two further Phase III studies are required for US approval.[2] Paion hopes to find licensee(s)[3] for M6G during 2010, with a view to resuming clinical development later this year depending on whether any US partner seeks to obtain an SPA. Given that the regulatory pathway has been clarified and M6G has been classified as a new chemical entity, it should be an attractive proposition for a partner.

Paion's complete clinical R&D pipeline is summarised in Exhibit 1.

Exhibit 1: Paion's R&D portfolio

Programme	Indication	Development stage/notes
Desmoteplase	Acute ischaemic stroke (Phase III)	Plasminogen activator. Two Phase III studies (DIAS-3 and DIAS-4) are under way, each in 400-pts (previously 320) with acute ischaemic stroke, confirmed by angiography, to assess 90-day efficacy of 90µg/kg given 3-9 hours post stroke occurrence (study completion: Sept 2011). Sample size increased in both trials after lower effect size considered relevant for FDA. Earlier Phase III (DIAS-2) gave inconclusive results: post-hoc analysis revealed that c 70% of subjects had no visible vessel occlusion (so would not benefit from thrombolysis). 48-pt DIAS-J Japanese Phase II trial initiated March 2010 (study completion: Sept 2011). Global partnership with **Lundbeck** (deal comprises €8m upfront, €38m in development milestones and €25m in post-approval milestones, plus double-digit royalties [net of royalties payable to original licensor, **Bayer Schering**]). Expected filing 2012 (peak sales $600m); exclusivity to 2022. Eligible for fast track designation. Paion retains co-promotion rights to German-speaking countries.
M6G (morphine-6-glucuronide)	Peri-operative pain (Phase III)	Opioid (confirmed as new chemical entity). Meta-analysis of 769-pts from two Phase II and two Phase III studies confirmed M6G's analgesic effect and showed 28% reduction of nausea and vomiting cf morphine in the key 6-24 hours after treatment (p=0.018). PK/PD modelling suggests earlier administration (vs morphine) should achieve deeper analgesia and longer duration of action. Paion has obtained FDA advice on its proposed development programme – two Phase III studies (in bunionectomy and major surgery) are presumed required for M6G to obtain US approval, which would be conducted by a partner. Paion has put in place manufacturing for Phase III studies and expects to conclude a partnership in 2010. Expected launched 2013; peak sales $300m; exclusivity to 2020+.
CNS-7056 (remimazolam pINN)	Short-acting sedation	Fast-onset, short-duration anaesthetic, suitable for procedural sedation, induction/maintenance of anaesthesia and ICU sedation. Phase IIa in upper GI endoscopy and Phase Ib in colonoscopy volunteers completed. 160-pt Phase IIb trial in colonoscopy to start shortly; defining dose for Phase III trials (expected to start in 2011). Acquired from **GlaxoSmithKline** (with no further obligations). Licensed to **Ono** for development in Japan; $1m milestone received on first dosing in Phase I trial in April 2010, with further undisclosed milestones and royalties on sales. Paion is seeking ex-Japan partner(s) for further development. Potential launch 2013 (peak sales $500m); market exclusivity to 2027+.
Flovagatran	Thrombotic diseases	Direct thrombin inhibitor. In preclinical CABG (coronary artery bypass graft) surgery studies; but previously studied in two Phase IIa trials for PTCA and haemodialysis (market dominated by heparin). Worldwide rights acquired from **Trigen** for €0.3m with a further milestone payable on approval, but no royalties. Potential launch 2014+; peak sales $200m; market exclusivity to 2023+. Next steps to be decided after preclinical data in CABG become available this year.
Solulin	Cardiovascular diseases and radiation injury	Human thrombomodulin. Regulates thrombin production to control blood clots. Positioned as anticoagulant but with potential in inflammatory bowel disease and radiation injury. Phase I showed proof of concept. Further studies dependent on partnering: partnering process on hold until further preclinical work is complete. Licensed from **Bayer Schering**. Potential launch 2014+; peak sales estimate $200-400m; market exclusivity to 2020+.
GGF2 (glial growth factor 2)	Heart failure	Glial growth factor 2 (Type II Neuregulin I). IND filed (Q110) and accepted by the FDA in Q210. Phase I in heart failure expected to start by mid-2010.Rights to GGF2 licensed to **Acorda Therapeutics Inc** in 2002 by Paion UK (formerly CeNeS) in exchange for $3.5m in development milestones ($1m received to-date) and $5m on approval.

Source: Edison Investment Research

[2] These are a dose-ranging trial in bunionectomy (with morphine and placebo as controls) and an efficacy and nausea/vomiting study in major surgery. Both studies could be conducted in parallel and should be relatively quick to complete (the large volume of existing data reduces M6G development risk by enabling optimal trial design and the selection of appropriate endpoints).

[3] Regional rather than global development partners are sought due to the structure of the pain market.

Sensitivities

As with any biotech company, the key risk associated with Paion is the failure of products in clinical studies, or the generation of inconclusive or confounding data, deterring potential partners or prompting current licensees to hand back rights. Furthermore, potential or actual licensees or competitors may become involved in industry M&A, which could thwart or delay attempts to partner M6G or CNS-7056. Prior attempts by CeNeS to partner M6G were not successful, although subsequent analysis of M6G studies and confirmation by the FDA on the Phase III development plan should help attract new partners. In the absence of partnering for CNS-7056 (ex-Japan) or M6G, Paion will be reliant on its CCSCVF facility for funding into 2012.

Valuation

While we note that Paion is not reliant on any single project, new partnerships for M6G and CNS-7056 are key to Paion's investment case as these would strengthen the company's financial position and reduce risk. However, Paion's recent milestone reciepts from existing partners (Acorda and Ono) and the CCSCVF facility have alleviated any near-term funding concerns.

We value Paion using a risk-adjusted net present value (rNPV) approach, using inputs summarised in Exhibit 2, a 12.5% cost of capital and factoring in a base cost of running the business. We take a relatively conservative view, presently only factoring in the three most advanced projects and we take an extremely cautious view of the risk of desmoteplase. Normally the success probability of a Phase III programme would be around 65%, but we have set this at only 35% on account of the extremely high historic failure rate of stroke projects. On this conservative basis our rNPV model generates a value of €72m, or €76m including Paion's 2010e net cash balance. This compares with a current EV (market cap less net cash) of €40m.

Exhibit 2: Paion valuation model inputs

Note: Potential milestones on desmoteplase are captured as part of the estimated royalty rate (net of a royalty to Bayer Schering).

Product	Status	Probability of success	Est launch year	Est peak market share	Current market value	Est max royalty	Est peak sales	Current value
Desmoteplase	Phase III	35%	2013	5%	$5,000m	11%	$401m	€11m
M6G	Phase III	60%	2013	28%	$800m	18%	$296m	€17m
CNS-7056 (remimazolam)	Phase II	30%	2013	14%	$2,000m	12%	$502m	€13m

Total rNPV	€72m
FY10e net cash	€4m
Total valuation	€76m

Source: Edison Investment Research

We acknowledge that there is significant upside to our valuation as we do not currently include any value for upfront milestones that may be received on the successful partnering of CNS-7056 and/or M6G during 2010, nor future Lundbeck milestones (desmoteplase could trigger €38m of regulatory milestones and €25m post approval). A partnership for either M6G or CNS-7056 should crystallise more value as the deal terms will become apparent (and may differ from our assumptions). Our model also excludes Solulin and flovagatran (any licensing deals for these would represent pure upside) and we also currently ascribe no value to GGF2 as little is known about the profile of this programme (although with up to $7.5m in potential milestones, it clearly has some value to Paion).

Financials

Paion recently reported its Q110 results: revenues of €0.7m were comprised of the first $0.5m Acorda milestone and recognition of deferred revenue relating to the Lundbeck €8m upfront payment. R&D spending decreased slightly on the prior period, with G&A in line. Paion ended Q110 with a cash balance of €19.2m, which translated to net cash of €12.4m on account of the outstanding €6.9m subordinated loan (repayment due 2013).

We maintain our 2010 forecast R&D spending of €9m (mainly to take CNS-7056 through Phase IIb as Lundbeck is absorbing the full cost of desmoteplase) and admin expenditure of €4.2m. Our revenue forecasts include the continued recognition of the Lundbeck up-front payment, but we have increased our anticipated other milestone revenue to include both the $0.5m already received from Acorda and the further $1.5m in combined milestones from Ono and Acorda which will be booked in Q2. However, our revenue forecast continues to exclude deals yet to be signed and, at present, the €38m of regulatory milestones in 2011-12 from Lundbeck should desmoteplase development be successful. This suggests that in the absence of any additional licensing deals, Paion will have a €3m funding requirement in 2011 to continue operating (Phase III desmoteplase trials are not expected to read out until H211), but this is likely to be covered by share issuances under Paion's newly secured equity facility with CCSCVF.

€15m three year equity facility

Paion has secured a three year €15m equity facility agreement with Commerce Court Small Cap Value Fund (CCSCVF), a fund managed by Acqua Capital Management. This facility will be used to strengthen Paion's cash position, and provides long term funding enabling the company to fund the CNS-7056 Phase IIb trial and to extend its cash runway into mid-2012 through partial use. Under this facility Paion is permitted to issue tranches of new shares (out of existing authorised share capital – presently up to 2,460,291 shares, which equates to 10% of the number of currently outstanding shares) to CCSCVF for cash. The issued shares will be priced at a 5% discount to the daily volume weighted average price over the preceding five days, and be issued in minimum guaranteed tranches of between €150k and €1.3m depending on Paion's share price (from €1 up to and exceeding €8), although the respective parties can agree to higher amounts per investment tranche. Importantly, Paion has the right to set a floor below which it is not obliged to issue shares.

Prior to securing this facility, Paion had sufficient funding to support its business into mid-2011, but this runway has now been extended by one year. This facility removes the pressure to find additional sources of funds and also puts Paion in a stronger position with respect to its partnering discussions, facilitating further R&D (ie the Phase IIb CNS-7056 study) and giving Paion breathing space to execute the right out-licensing deal(s), rather than having to compromise too much on the economic terms. Equally importantly the structure of the facility provides Paion with a degree of flexibility and control regarding when additional funds are drawn down.

Our financial model, which currently assumes no new share issuance or drawn down under this facility, is summarised in Exhibit 3.

Exhibit 3: Paion Financial Model

€'000s	2007	2008	2009	2010e	2011e
Year end 31 December					
PROFIT & LOSS					
Revenue	**4,846**	**3,166**	**1,533**	**3,456**	**1,456**
Cost of sales	(2,979)	(780)	(51)	(64)	(64)
Gross profit	1,867	2,386	1,482	3,392	1,392
EBITDA	**(11,396)**	**(12,695)**	**(12,699)**	**(9,847)**	**(12,325)**
Operating profit (before GW and except.)	**(11,918)**	**(13,575)**	**(12,866)**	**(10,140)**	**(12,618)**
Depreciation and amortisation	(522)	(881)	(168)	(293)	(293)
Share-based payments	(705)	(224)	(129)	(150)	(150)
Exceptionals	0	0	0	0	0
Operating profit	**(12,624)**	**(13,799)**	**(12,995)**	**(10,290)**	**(12,768)**
Net interest	2,112	813	(381)	(200)	(200)
Profit before tax (norm)	**(9,807)**	**(12,763)**	**(13,248)**	**(10,340)**	**(12,818)**
Profit before tax (FRS 3)	**(10,512)**	**(12,986)**	**(13,377)**	**(10,490)**	**(12,968)**
Tax	0	406	340	340	340
Profit after tax (norm)	**(9,807)**	**(12,357)**	**(12,908)**	**(10,000)**	**(12,479)**
Profit after tax (FRS3)	**(10,512)**	**(12,580)**	**(13,037)**	**(10,150)**	**(12,629)**
Average number of shares outstanding (m)	16.8	20.9	24.6	24.6	24.6
EPS - normalised (c)	(58.5)	(59.3)	(52.5)	(40.6)	(50.7)
EPS - FRS 3 (c)	(62.7)	(60.3)	(53.0)	(41.3)	(51.3)
Gross margin (%)	38.5%	75.4%	96.7%	98.1%	95.6%
EBITDA margin (%)	NA	NA	NA	NA	NA
Operating margin (before GW and except.) (%)	NA	NA	NA	NA	NA
BALANCE SHEET					
Fixed assets	**1,365**	**11,746**	**11,671**	**11,378**	**11,084**
Intangible assets	462	11,336	11,380	11,233	11,086
Tangible assets	903	409	292	145	-2
Refund from assumption of dev costs	0	0	0	0	0
Other	0	0	0	0	0
Current assets	**44,177**	**37,567**	**23,879**	**12,778**	**(863)**
Stocks	0	0	0	0	0
Debtors	777	100	94	100	100
Cash	42,901	36,072	22,871	11,678	(1,963)
Other	499	1,395	913	1,000	1,000
Current liabilities	**(3,132)**	**(4,359)**	**(4,183)**	**(4,006)**	**(3,756)**
Trade payables	(2,295)	(1,592)	(1,724)	(1,700)	(1,700)
Short-term borrowings	0	0	0	0	0
Provisions	(421)	(867)	(611)	(500)	(250)
Finance lease liabilities	(72)	(62)	0	0	0
Other current liabilities	(320)	(373)	(391)	(350)	(350)
Current deferred income	(24)	(1,466)	(1,456)	(1,456)	(1,456)
Long-term liabilities	**(6,746)**	**(13,426)**	**(12,033)**	**(10,602)**	**(9,146)**
Long-term borrowings	(6,657)	(6,825)	(6,858)	(6,858)	(6,858)
Provisions	0	(1,427)	(1,467)	(1,467)	(1,467)
Long-term deferred income	(27)	(5,174)	(3,709)	(2,278)	(822)
Deferred taxes	0	0	0	0	0
Other long-term liabilities	(62)	0	0	0	0
Net assets	**35,664**	**31,528**	**19,334**	**9,548**	**(2,681)**
CASH FLOW					
Operating cash flow	**(15,267)**	**(6,292)**	**(12,859)**	**(11,333)**	**(13,781)**
Net interest	1,264	1,121	(245)	(200)	(200)
Tax	0	406	340	340	340
Capex	0	0	0	0	0
Purchase of intangibles	(204)	41	(108)	0	0
Acquisitions/disposals	0	(476)	0	0	0
Financing	0	(981)	0	0	0
Dividends	0	0	0	0	0
Other	(81)	(75)	(63)	0	0
Net cash flow	(14,288)	(6,257)	(12,935)	(11,193)	(13,641)
Opening net debt/(cash)	**(50,447)**	**(36,244)**	**(29,247)**	**(16,014)**	**(4,821)**
Effect of exchange rate changes	0	(166)	74	0	0
Other	84	(574)	(372)	0	0
Closing net debt/(cash)	**(36,244)**	**(29,247)**	**(16,014)**	**(4,821)**	**8,821**

Source: Edison Investment Research