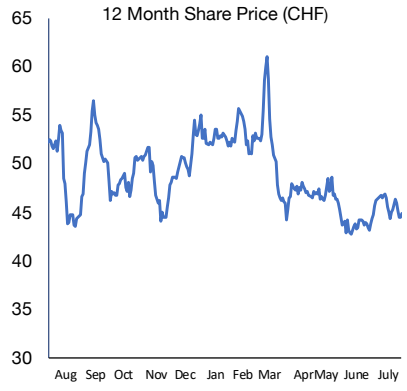
Basilea Pharmaceutica

6 July 2021

Share Price (CHF)	**44.9**
CP Fair Value (CHF)	**120**
Market Cap (CHFm)	586
Cash (CHFm)	160
EV (CHFm)	676
Country	Switzerland
Code	BSLN
Index	SIX



Source: Calvine Partners Research

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Lisavanbulin – showing lots of promise

Basilea's expertise in oncology is clearly growing, benefiting from a strategy to identify those patients best suited to respond across the oncology pipeline. This is particularly important in previously intractable cancers where an all-comers approach elsewhere has been beset with disappointment and failure. One of the most challenging cancers remains brain cancer and glioblastoma multiforme in particular. Attempts to develop effective treatments have been largely unsuccessful, but the observation that patients receiving lisavanbulin have derived significant benefit is potentially transformational for relevant patients.

From an existing class but highly differentiated

Basilea has invested heavily in establishing a meaningful and relevant oncology franchise. Lisavanbulin represents an important programme targeting the mitotic spindle. While historically, microtubule targeting agents (MTAs) have been dominated by natural compounds and have proven to be some of the most effective chemotherapeutic agents available commercially, they have been associated with significant toxicity and the rapid emergence of resistance. Nevertheless, advances in our understanding of the importance of the microtubule in tumour biology has led to the development of new synthetic candidates like lisavanbulin, which are active against previously resistant cancers. Furthermore, Basilea appears to have identified a predictive biomarker (EB1), which should enable the identification of suitable patients for lisavanbulin, improving the odds of success.

Recent insight at ASCO extremely encouraging

These may be early days for lisavanbulin, but the observation that some patients have a profound response is extremely encouraging, given glioblastoma is usually an aggressive and deadly cancer. The role of EB1 is still being evaluated. Data presented at relevant medical conferences such as ESMO and now ASCO have shown that EB1 is potentially a key prognostic factor. Importantly, those patients who benefited most were found to have strong EB1 positive status suggesting this should be a key eligibility factor for lisavanbulin treatment. Prevalence data suggest that circa 5% of glioblastoma patients would benefit with broader potential in other strongly EB1 positive tumours such as medulloblastoma and neuroblastoma, while metastatic melanoma, lung (NSCLC), colon and triple-negative breast cancers may also be candidates. Lisavanbulin currently sits outside of our forecasts and valuation suggesting an important source of upside as data mature. (For Risks see Page 11).

Lisavanbulin – potentially a transformative treatment for selected brain cancer patients

Glioblastoma remains one of the most aggressive and deadliest cancers

Brain cancer remains one of the most insidious of human tumours. Of these, glioblastoma multiforme (glioblastoma) is generally considered the most aggressive and deadly of human cancers. Unsurprisingly, glioblastoma mortality rates are high and median life expectancy is approximately 14-15 months.

Notable in its ability to develop resistance

Despite remarkable advances in the treatment of many previously intractable cancers, particularly the introduction of the checkpoint inhibitors in immunotherapy, little has been achieved in improving the outlook and prognosis for glioblastoma patients. Despite the introduction of radiotherapy and chemotherapies (1st line temozolomide; TMZ), glioblastoma is notable for its ability to develop resistance leading to relapse and the abovementioned poor expected lifespan.

Various challenges have hampered drug development

This is perhaps unsurprising given that glioblastoma presents several previously insurmountable challenges. As it grows, the tumour infiltrates surrounding healthy brain tissue in an erratic fashion, making it difficult for the resecting surgeon to remove the entire tumour successfully. Furthermore, the tumour presents a collection of heterogeneous tumour cells, many of which employ separate biological pathways, making it difficult to develop a treatment that is universally efficacious in a broad range of glioblastoma patients.

Lack of representative animal models unhelpful

This has also presented a further challenge to the medical community particularly with respect to the development of useful animal models to use in drug development. Animal models often represent cells from a discrete part of the tumour and do not reflect the physiological reality and heterogeneity of a human glioblastoma *in situ*.

Identification of relevant biomarkers in glioblastoma has been disappointing to date

Clearly, smarter strategies are required when developing novel treatments for glioblastoma. The use of biomarkers has been well documented in other cancers, with companion diagnostics typically approved at the same time as a targeted therapy. Even the checkpoint inhibitors (CKIs) appear to work best in patients with tumours with high levels of PD-L1 receptors. Additionally, tumour mutational burden has been touted as a potential biomarker for improved CKI performance. However, glioblastomas are immunologically cold, and as a result, there appears little prospect of CKIs providing a clinically meaningful benefit in many patients.

Indeed, efforts so far have been limited by a combination of molecular and immunological heterogeneity typical of glioblastoma making the identification of suitable biomarkers for immunotherapy challenging although efforts are ongoing.

Highly targeted approach has delivered very promising results

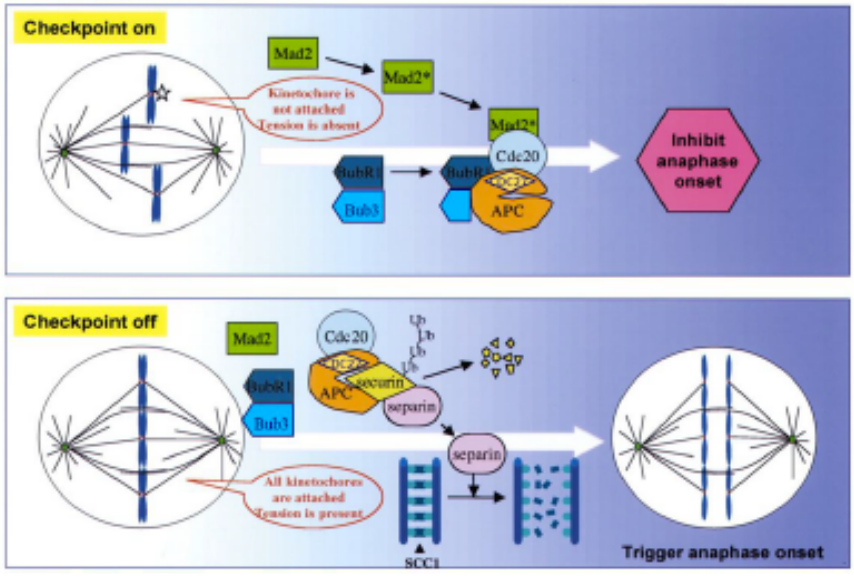
The approach taken by Basilea in its development of lisavanbulin has been to use a novel biomarker (EB1) which should help identify those patients who would benefit most from an inhibitor of the spindle assembly checkpoint. Data so far have been highly encouraging.

Lisavanbulin exploits a well-characterised cancer target

Targeting the mitotic spindle

Lisavanbulin is a tumour checkpoint controller exerting its influence at the mitotic checkpoint or spindle assembly checkpoint (SAC). The mitotic checkpoint has long been an important target in cancer, since preventing cells (in this case tumour cells) from passing through mitosis (somatic cell division) rapidly leads to apoptosis and cell death. Unsurprisingly, mitosis has been identified as a particularly important step in cancer cell proliferation.

Over time it has proven to be a successful therapeutic strategy to selectively eliminate actively growing cancer cells. The mitotic checkpoint is one of four checkpoints which ensure the fidelity of cell division, arresting cell division if each checkpoints condition is not successfully met. In addition to the mitotic checkpoint the other three (G1/S, S & G2/S) are DNA damage checkpoints.



Adapted from Zhou J et al. J Cell Sci 2002;115:3547-3555

Microtubules perform several important roles in cell division (mitosis and meiosis) as well as migration and have proven to be important targets for chemotherapy. In dividing cells during mitosis, the microtubules forming the mitotic spindle ensure that chromosomes are shared equally between dividing cells.

Lisavanbulin's ability to cross the blood/brain barrier an obvious differentiator

With many existing microtubule therapies derived from natural sources, development of newer synthetic (or semi-synthetic) microtubule agents has been slow but represents an obvious route for development, particularly as they should be able to cross the blood-brain barrier.

MTAs have their limitations although need for effective treatments in glioblastoma suggest lower hurdle

Although MTAs have proven to be highly effective in multiple solid and haematological cancers, side effects associated with their long and short-term use have limited their applicability and use. DNA damage and apoptosis are the main causes of drug-induced cytotoxicity, while neurological and haematological side effects are dose-limiting toxicities. As a result, peripheral neuropathy is estimated to affect as many as 80% of patients receiving taxanes. There are also other challenges, which include poor solubility and cumbersome synthesis/manufacture, which have served to hamper their optimisation.

Development of resistance suggests a highly targeted approach beneficial

One of the most significant factors limiting the applicability of microtubule inhibitors has been the development of rapid resistance. Multiple mechanisms of drug resistance have been characterised, which typically involve efflux mechanisms and membrane-associated changes to prevent drug accumulation within tumour cells.

Lisavanbulin has a differentiated profile

Lisavanbulin is highly potent

Basilea's focus has been to overcome resistance issues and deliver a chemotherapy combining strong efficacy, a suitable therapeutic window, and reduced resistance issues. Lisavanbulin (formerly BAL101553) is a (highly soluble) prodrug of BAL27862, retaining its potency in human tumour models which are resistant to archetypal MTAs, including the taxanes and the vinca alkaloids. BAL27862 binds to the colchicine site with distinct effects on microtubule organisation via a unique mechanism of action, which importantly, is separate to that of other established MTAs. Preclinical studies have shown that BAL27862 leads to an activation of the SAC arresting tumour cell proliferation in the G2/M phase of the cell cycle. As a result, it is an extremely potent inhibitor of tumour growth and a promoter of cell death.

As a small molecule, another key feature of lisavanbulin is its ability to cross the blood-brain barrier - unlike many

Dual mechanism of action helpful with respect to resistance

commercially available MTAs, which are natural compounds. Additionally, lisavanbulin appears to possess a dual mechanism of action, inhibiting not only growth and viability of the tumour but also the vasculature feeding the tumour.

Appropriate therapeutic window combined with oral bioavailability

Basilea has been assiduous in ensuring that lisavanbulin has an appropriate therapeutic window, balancing its antitumour effect with an acceptable side effect profile. Given that all commercially available MTAs are delivered parenterally, lisavanbulin offers a clear convenience advantage given that it is orally bioavailable.

Basilea has been evaluating lisavanbulin in a broad range of cancer types, both in monotherapy as well as in combination (in a preclinical setting so far), reflecting the broad applicability of the approach. Glioblastoma has been the initial focus. Post resection, current standard of care consists of radiotherapy and concomitant temozolomide. Despite the use of radiation and TMZ, treatment provides a disappointing median survival period of only 14.6 months. While new therapeutic approaches are urgently required, development of novel therapies for glioblastoma has been disappointing.

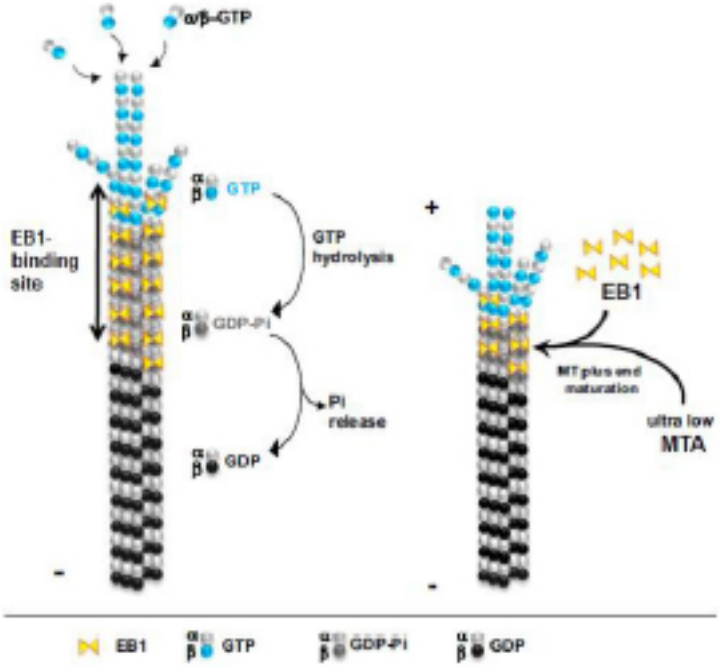
Identifying appropriate patients is key

Selecting responders key for patient benefit

With the development of targeted therapies, the identification of patients who most benefit from treatment has become the new normal for cancer drug development. This has the benefit of increasing the likelihood of a positive clinical outcome (and regulatory approval) as well as removing the risks associated with the side effects of administering unwarranted treatment to patients who experience little to no benefit.

EB1 looks to be an appropriate biomarker

Given that lisavanbulin inhibits the spindle assembly checkpoint, this is an obvious target for Basilea's search for an appropriate biomarker. This has resulted in the identification and selection of End-binding protein (EB1) due to its important role (along with its binding partners) in microtubule regulation. EB1 is a member of the plus-end-tracking protein family, which accumulates at growing microtubule ends and serves to regulate microtubule dynamics. MTAs are thought to induce apoptosis through an EB1 dependent mechanism. Consequently, there are good reasons to believe EB1 expression levels in cancer should be a predictive biomarker of MTA activity.

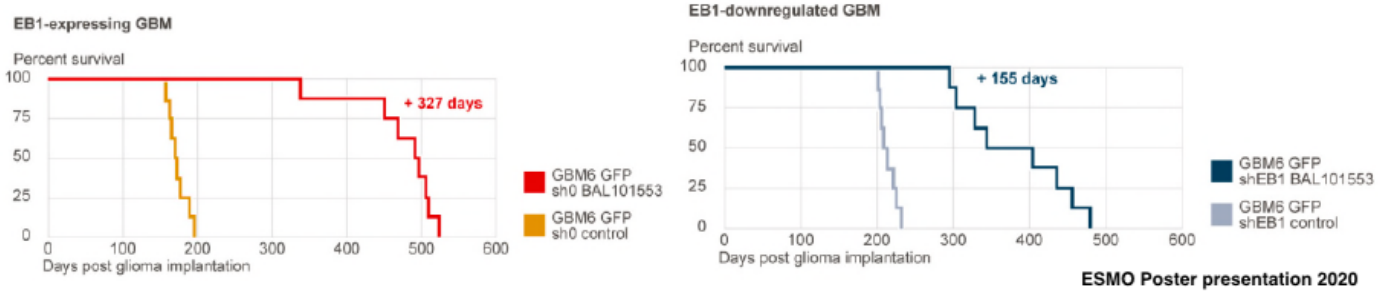


Microtubule-targeting agents (MTAs) can shorten the EB-stabilizing cap at MT-plus ends which leads to MT catastrophes. In this context EB1 and MTAs may act synergistically to shorten the EB1 binding region

Preclinical data highly supportive of role of EB1

From Basilea's perspective, the preclinical data supporting the role of EB1 appears strong, with daily oral administration of lisavanbulin associated with a significant improvement in survival in an EB1 positive model of glioblastoma. Median survival was extended by 327 days in EB1 proficient mice compared with 155 days in EB1 negative mice treated with lisavanbulin.

Effect of lisavanbulin on survival in mice with EB1 proficient or deficient GLIOBLASTOMA



ESMO Poster presentation 2020

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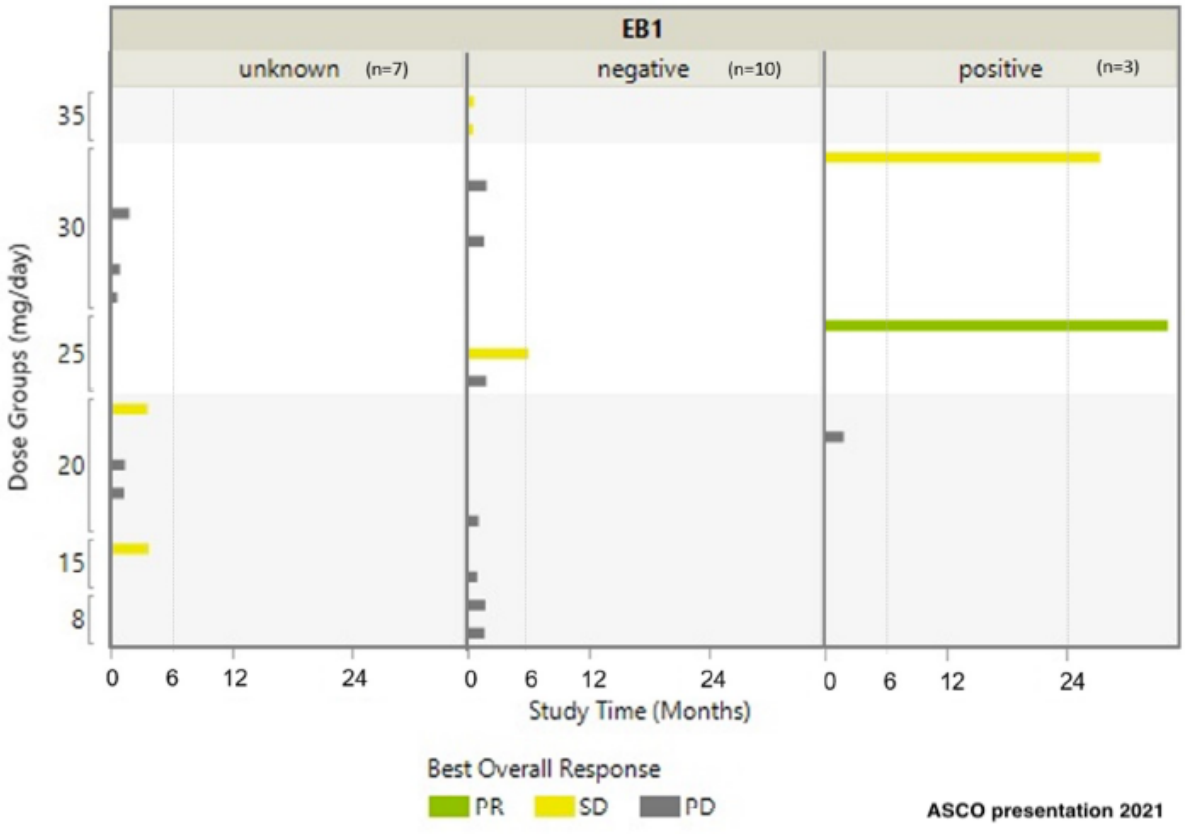
The experience of 2 patients who experienced long lasting clinical benefit is truly remarkable

In the clinic, data have been very promising indeed. Two patients have exhibited long-lasting clinical benefit. Of these, one EB1 (highly) positive patient experienced a strong and durable response to lisavanbulin. Basilea provided additional information on this patient at ESMO 2020. This glioblastoma patient's cancer had previously progressed rapidly after two prior lines of therapy. The patient experienced an 80% glioblastoma area reduction and remains on study two years after start of lisavanbulin therapy.

Association of EB1 with long lasting clinical benefit is highly encouraging for biomarker led strategy

More recently at ASCO 2021, further detail was provided on the relevance of EB1 as a biomarker for lisavanbulin and on the EB1 positive patients who have experienced sustained clinical benefit. Of the 20 patients in the Phase 1 portion of the ongoing Phase 2 study, glioblastoma tissue was available from 13 patients of which 3 were EB1 positive. While none of the EB1 negative patients appeared to benefit from lisavanbulin the patients who experienced a long-lasting clinical benefit (previously described as a profound response) were both EB1 positive. In addition to the patient who experienced a >80% reduction in glioblastoma tumour area, a second patient experienced stable disease in glioblastoma lesions with improvement in non-target disease.



Looking at alternative approaches to more easily measure EB1 levels

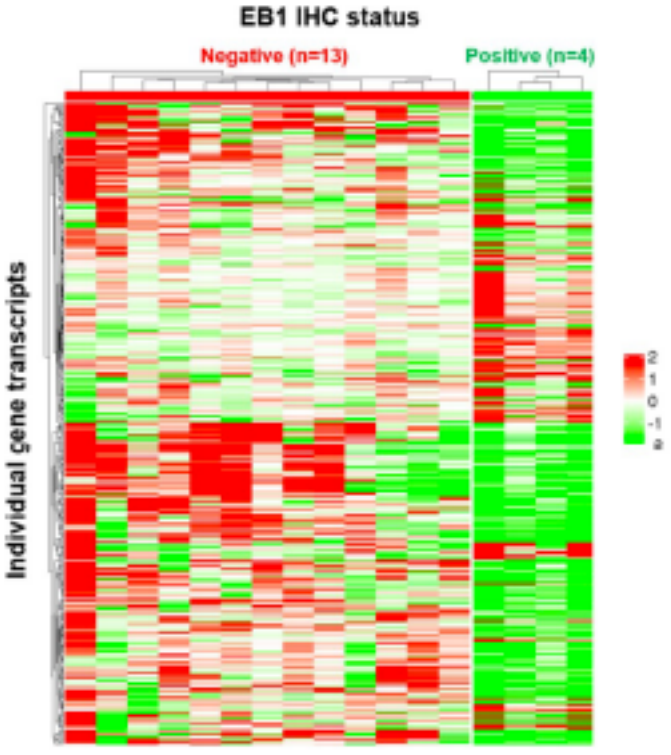
Determining a threshold for EB1 positivity

EB1 biomarker studies have been based on immunohistochemical (IHC) staining of glioblastoma tissue. The criteria used for determining whether a patient is EB1 positive are based on the EB1 staining intensity observed in the exceptional EB1 responder and requires moderate or strong staining in at least 70% of sample cells. Results presented at ASCO 2021 suggested that using these criteria, approximately 5% of glioblastoma patients are sufficiently EB1 positive to be candidates for lisavanbulin therapy.

Basilea also evaluating a response predictive gene signature

Basilea is also evaluating the potential for a response-predictive gene signature to determine EB1 positivity. Data presented at ASCO 2021 suggests that a retrospective analysis of tissue samples from the Phase 1 portion suggests that patients who are EB1 positive have different gene expression profiles compared to EB1 negative patients.

Differential Patient gene expression profiles based on EB1 status



Source: ASCO 2021

EB1 relevance to other cancers

EB1 may be a reliable biomarker in other cancers

In addition to the difficult glioblastoma cancer indication, EB1 overexpression has also been reported in several other cancers suggesting a broader patient population that may respond to lisavanbulin. These include lung, gastric, hepatic and oral cancers, where EB1 potentially serves as a biomarker for tumour progression. Its cancer-causing potential has also been noted in oesophageal, and breast cancer cell lines.

ASCO data provided detail on relevance of EB1 to non GLIOBLASTOMA tumours too

Basilea has endeavoured to measure the degree to which patients suffering from various cancer also present with a sufficient levels of EB1 to suggest that they may also be tractable to treatment with lisavanbulin. At ASCO 2021, data were presented from 565 tissue samples (108 were glioblastoma) with the remainder representing 13 different tumour types.

Summary of moderate or strong EB1 staining across 14 tumour types

		Threshold in % of tumor cells with moderate to strong EB1 staining										
Tumor Type	Tissue samples N	<10%	≥10%	≥20%	≥30%	≥40%	≥50%	≥60%	≥70%	≥80%	≥90%	100%
Medullobastoma	7	71%	29%	29%	29%	29%	14%	14%	14%	14%	14%	14%
Neuroblastoma	13	38%	62%	54%	38%	38%	23%	23%	15%	15%	8%	0%
Glioblastoma	108	52%	48%	40%	34%	19%	11%	9%	6%	2%	0%	0%
Metastatic melanoma	60	43%	57%	48%	33%	18%	8%	3%	2%	0%	0%	0%
Colorectal cancer (CRC)	56	29%	71%	59%	38%	21%	13%	4%	0%	0%	0%	0%
Non-smal cell lung cancer (NSCLC)	60	62%	38%	35%	22%	15%	7%	3%	0%	0%	0%	0%
Triple megative breast cancer (TNBC)	47	81%	19%	11%	11%	6%	4%	2%	0%	0%	0%	0%
Smal cell lung cancer (SCLC)	13	62%	38%	31%	15%	15%	8%	0%	0%	0%	0%	0%
Gynecaoligical carcinosarcomas (GYN-CS)	30	63%	37%	30%	20%	3%	0%	0%	0%	0%	0%	0%
Hepatocellular carcinoma (HCC)	30	73%	27%	20%	17%	3%	0%	0%	0%	0%	0%	0%
Breast cancer (non-TNBC)	30	90%	10%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Prostate cancer	30	93%	7%	7%	3%	0%	0%	0%	0%	0%	0%	0%
Soft-tissue sarcoma	30	90%	10%	7%	0%	0%	0%	0%	0%	0%	0%	0%
Rcenal cell cancer (RCC)	30	93%	7%	7%	0%	0%	0%	0%	0%	0%	0%	0%

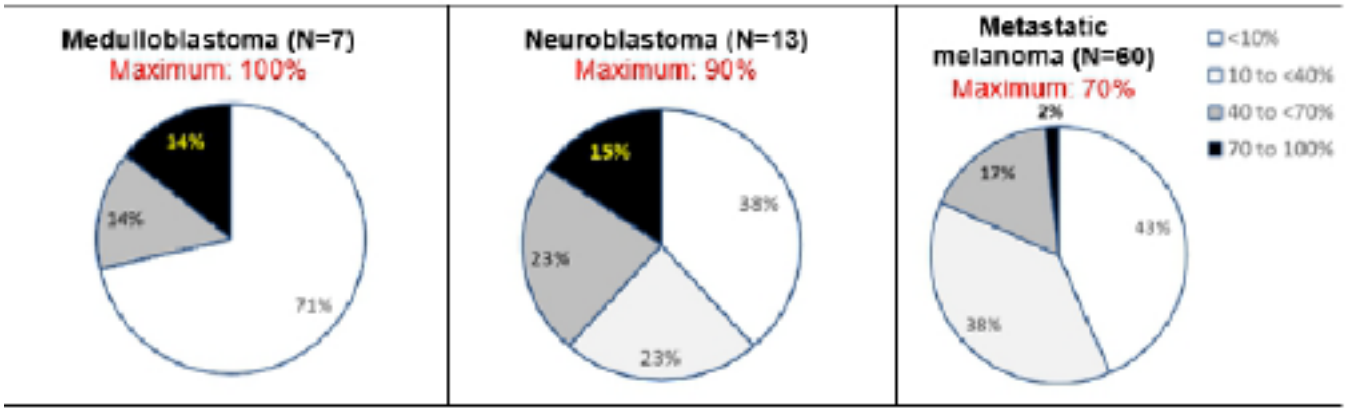
Source: ASCO 2021

Prevalence data suggest that lisavanbulin could have broader applicability

Outside of glioblastoma, analysis of these tissue samples suggests that other tumour types, where there is EB1 staining in at least 70% of cells, may also be tractable to lisavanbulin include medulloblastoma, neuroblastoma and metastatic melanoma. With respect to prevalence, these data further suggest that in medulloblastoma and neuroblastoma over 10% of tissue samples met this threshold, whereas this number would be less than 5% in metastatic melanoma.

While these tumour types may represent obvious next steps for Basilea based on strong (at least 70% EB1 positivity), several other cancer were modestly below this threshold (circa 60%) with lung cancer (NSCLC), colorectal cancer and triple negative breast cancer. Prevalence data suggested that <5% of tissue samples met this threshold.

Prevalence of moderate/strong EB1 staining



Source: ASCO 2021

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Risks

Basilea's currently marketed products are out-licensed to third parties, suggesting little influence over sales performance. Nevertheless, execution on key product Cresemba, has been through highly appropriate partners (particularly Astellas and Pfizer).

While the antibiotic Zevtera is already marketed outside of the USA for the treatment of CAP and HAP (excluding VAP), we see the more significant market opportunity in the *Staph aureus* bacteraemia indication. While data from those patients in the four completed Phase III trials which suffered from a bacteraemia are supportive of this approach, there is uncertainty associated with this difficult to treat patient population which is reflected in the probability adjustment we have employed. Approval of ceftobiprole in the US requires a positive outcome for both the (lower risk) ABSSSI indication (already achieved) as well as the bacteraemia indication. .

The oncology programmes are also unpartnered. This is a highly competitive field, but we note Basilea's endeavours to differentiate derazantinib and we would highlight the combination with the checkpoint inhibitors as a starting point. Data on lisavanbulin may be in a small number of patients but the effects have been remarkable in two patients with long-lasting clinical benefit. For now, lisavanbulin sits outside our forecasts so represents upside to our financial model and valuation.

Our financial forecasts suggest Basilea will experience several years of losses. With our expectation of a 2023 launch for ceftobiprole, our forecasts do not incorporate the expected upfront payment that the company would receive from a commercial partnership. Consequently, we are forecasting a negative cash position but recognise that there are many puts and takes to our forecasts. Additionally, we have effectively taxed the company on its first year of profits despite the observation that there are significant tax losses which will significantly reduce the tax burden in the near term.

Financial Model and Summary

R&D focus at Basilea has been on the oncology franchise

Basilea has invested heavily in pursuing its goal of delivering an oncology franchise, diversifying its historical reliance on anti-infectives. Clearly much relies in the near term on the future of derazantinib given it is a late-stage asset in a class (FGFR inhibitors) which has been validated by approvals elsewhere. Data so far in biliary cancer has been highly competitive, and we look to further data readouts as they arise particularly in the urothelial and gastric cancer indications where the company is now following a dose intensification strategy to maximise derazantinib's potential. Ultimately, success here will rely on the ability of Basilea to deliver a differentiated profile in an intensifying competitive environment.

Importance of lisavanbulin growing as encouraging data emerge

Lisavanbulin represents an increasingly important pipeline asset as more promising data emerges. Lisavanbulin has shown significant promise of delivering a potent and effective chemotherapy in glioblastoma, one of the most challenging and aggressive of cancers. While the efficacy hurdle may be low, lisavanbulin needs to balance its potency with an effective therapeutic window from a class which has been associated with significant toxicities. Effective targeting could be key to addressing this balance.

Data in selected glioblastoma patients remarkable

Data so far have been extremely encouraging and we look forward with keen anticipation to the results from the ongoing Phase 2 trial. Evidence of profound responses in two patients, both of whom were EB1 positive suggests that Basilea is following a highly targeted approach. Indeed, data presented at recent cancer conferences ESMO and ASCO appear to validate the use of EB1 as a key marker determining eligibility for future treatment with lisavanbulin.

Looking forward to more data emerging over time

A future path for lisavanbulin will clearly depend on the data, and while 5% of glioblastoma patients may seem a modest opportunity, the potential to deliver a long lasting treatment option for these patients could be transformational.

Currently outside of our financial model and valuation

Despite its promise, lisavanbulin currently sits outside of our financial model and valuation for Basilea. Clearly glioblastoma is a challenging cancer although the use of EB1 should increase the probability of success. Ultimately, the market potential for lisavanbulin could be substantial particularly if the EB1 driven approach is relevant to a broader range of cancers.

Basilea Income Statement (CHF'000)

Year to December	2019A	2020A	2021E	2022E	2023E	2024E	2025E
Total revenue	**134381**	**127629**	**132743**	**133939**	**150134**	**193186**	**257229**
COGS	(18,868)	(24,054)	(25,221)	(25,448)	(26,273)	(30,910)	(33,440)
Gross profit	**115,513**	**103,575**	**107,522**	**108,491**	**123,861**	**162,276**	**223,789**
Gross margin	86.0%	81.2%	81.0%	81.0%	82.5%	84.0%	87.0%
R&D	(102,662)	(97,410)	(96,902)	(93,757)	(87,078)	(80,365)	(85,400)
SG&A	(30,051)	(29,422)	(31,858)	(31,074)	(33,029)	(36,705)	(41,157)
Total cost and operating expenses	(151,581)	(150,886)	(153,982)	(150,280)	(146,381)	(147,980)	(159,996)
Non-underlying items	0.00	15,035	0.00	0.00	0.00	0.00	0.00
Operating profit US GAAP	**(17,200)**	**(8,222)**	**(21,239)**	**(16,341)**	**3,753**	**45,205**	**97,233**
Finance income	28	104	0	161	167	158	9
Finance expense	(6,424)	(7,589)	(7,456)	(7,480)	(3,225)	(3,225)	(3,225)
Other financial income	1,583	2,057	0	0	0	0	0
Other financial expense	(369)	(1,017)	0	0	0	0	0
Underlying PBT	(22,382)	(29,702)	(28,695)	(23,660)	696	42,139	94,016
PBT IFRS	(22,382)	(14,667)	(28,695)	(23,660)	696	42,139	94,016
Loss before tax	(22,382)	(29,702)	(28,695)	(23,660)	696	42,139	94,016
Tax	(40)	(55)	(60)	(60)	(99)	(5,984)	(13,350)
Underlying net income	**(22,422)**	**(29,757)**	**(28,755)**	**(23,720)**	**597**	**36,155**	**80,666**
Net income US GAAP	**(22,422)**	**(14,722)**	**(28,755)**	**(23,720)**	**597**	**36,155**	**80,666**
EPS Basic (CHF)	(2.09)	(1.43)	(2.80)	(2.10)	0.05	3.20	7.15
EPS Diluted (CHF)	**(2.08)**	**(1.36)**	**(2.55)**	**(2.10)**	**0.05**	**3.20**	**7.15**

Source: Calvine Partners Research

Basilea Cash Flow Statement (CHF'000)

Year to December	2019E	2020A	2021E	2022E	2023E	2024E
Net profit/(loss)	(22,422)	(14,722)	(28,755)	(23,720)	597	36,155
Depreciation and amortization	1,639	1,190	595	621	650	682
Gain on disposal of assets, net	0	(15,035)	0	0	0	0
Stock-based compensation	3,048	3,525	0	0	0	0
Interest and accretion of debt issuance cost	758	1,670	800	534	0	0
Accounts receivable	(2,457)	(1,657)	(1,203)	(2)	(891)	(2,368)
Other receivables	8,909	(1,657)	0	0	0	0
Inventories	(4,142)	(2,618)	(5,884)	2,234	(2,698)	(7,172)
Accounts payable	378	6,394	30	(131)	(263)	(93)
Deferred revenue	(45,626)	(33,630)	(20,000)	0	0	0
Accruals and other current liabilities	693	(1,425)	0	0	0	0
Other operating cash flow items	(4,614)	4,639	(2,300)	0	0	0
Net cash provided by/used in operating activities	**(63,836)**	**(53,326)**	**(56,717)**	**(20,463)**	**(2,605)**	**27,203**
Cash flow from investing activities						
Payments for short-term investments	(20,000)	(81,023)	0	0	0	0
Maturities of short-term investments	50,000	30,000	81,023	25,507	0	0
Payments for long-term investments	(30,000)	0	0	0	0	0
Proceeds from sale of assets	0	18,325	0	0	0	0
Investments in tangible assets	(294)	(1,823)	(525)	(578)	(636)	(699)
Investment in intangible assets	(110)	(442)	(332)	(332)	(332)	(332)
Net cash used in/provided by investing activities	**(404)**	**(34,963)**	**80,165**	**24,597**	**(968)**	**(1,032)**
Cash flow financing activities						
Net proceeds from exercise of stock options	37	1,322	0	0	0	0
Repayment of Convertible loan	0	(53,634)	0	(150,640)	0	0
Issuance of Convertible bonds	0	93,892	0			
Purchase of treasury shares	1,272	3,487				
Issuance of new shares			43,005			
Net cash provided by financing activities	**1,309**	**45,067**	**43,005**	**(150,640)**	**0**	**0**
Effect of exchange rate changes on cash and cash equivalents	67	(758)	0	0	0	0
Net change in cash and cash equivalents	(62,864)	(43,980)	66,453	(146,507)	(3,573)	26,172
Cash and cash equivalents at beginning of period	173,908	111,044	66,256	132,709	(13,798)	(17,371)
Cash and cash equivalents at end of period	**111,044**	**67,064**	**132,709**	**(13,798)**	**(17,371)**	**8,801**

Source: Calvine Partners Research

Basilea Balance Sheet (CHF'000)

Year to December	2019A	2020A	2021E	2022E	2023E	2024E
Non-current assets						
Tangible assets, net	5,162	2,627	2,890	3,179	3,497	3,846
Intangible assets, net	372	672	672	672	672	672
Long-term investments	30,000	0	0	0	0	0
Other non-current assets	1,073	2,967	2,967	2,967	2,967	2,967
Total non-current assets	36,607	6,266	6,529	6,818	7,136	7,485
Current Assets						
Cash and cash equivalents	109,024	60,749	132,709	(13,798)	(17,371)	8,801
Short-term investments	22,020	106,530	25,507	0	0	0
Accounts receivable	6,242	8,710	7,365	7,367	8,257	10,625
Other receivables	22,053	23,684	23,684	23,684	23,684	23,684
Inventories	18,569	21,192	24,549	22,314	25,012	32,185
Other current assets	6,952	2,663	2,663	2,663	2,663	2,663
Total current assets	184,860	223,528	216,476	42,230	42,246	77,957
Total assets	**221,467**	**229,794**	**223,005**	**49,048**	**49,381**	**85,443**
Current liabilities						
Accounts payable	6,765	13,151	5,496	5,364	5,101	5,007
Deferred revenue	32,873	2,556	0	0	0	0
Accruals and other current liabilities	35,856	34,454	34,454	34,454	34,454	34,454
Total current liabilities	75,494	50,161	39,950	39,818	39,555	39,461
Non-current liabilities						
Convertible senior unsecured bonds	197,740	239,668	249,340	99,234	99,234	99,234
Deferred revenue, less of current portion	16,471	13,158	0	0	0	0
Other non-current liabilities	24,722	28,853	28,853	28,853	28,853	28,853
Total non-current liabilities	238,933	281,679	278,193	128,087	128,087	128,087
Total liabilities	**314,427**	**331,840**	**318,143**	**167,905**	**167,642**	**167,548**
Shareholders equity (deficit)						
Share capital	11,882	11,922	11,922	11,922	11,922	11,922
Additional paid-in capital	927,342	982,438	1,019,438	1,019,438	1,019,438	1,019,438
Accumulated other comprehensive loss	(24,555)	(27,252)	(27,252)	(27,252)	(27,252)	(27,252)
Treasury shares held by a subsidiary	(5,963)	(52,766)	(52,766)	(52,766)	(52,766)	(52,766)
Loss carried forward	(979,244)	(1,001,666)	(1,016,388)	(1,045,143)	(1,068,863)	(1,068,266)
Net loss for the year	(22,422)	(14,722)	(28,755)	(23,720)	597	36,155
Total shareholders' equity (deficit)	(92,960)	(102,046)	(93,801)	(117,521)	(116,924)	(80,769)
Total liabilities and equity (deficit)	**221,467**	**229,794**	**224,341**	**50,384**	**50,718**	**86,779**

Source: Calvine Partners Research

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