TPE 2023 – Guide to Answer

Derma

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MORNING PAPER

BRIEFING PAPER FOR TANYA SILVERTREE

Introduction

This paper has been commissioned by the Chief Executive ('CEO') of Derma. It seeks to provide information and advice on three topics:

- the pros and cons of the different funding options for Derma;
- control and other implications of contracting out the clinical testing of RetinX6 to Chemtest; and
- an appraisal of the financial and non-financial implications of the three proposals for marketing the cream including their respective benefits and risks.

1. The pros and cons of the funding options for Derma

Overview

In common with many private businesses in the pharmaceutical industry, there is a considerable research and development period where expenditure exceeds income. Derma has several promising projects under development but is still incurring annual losses. In time, as products come to market, Derma should move into profit but at least in the short-term, development funding is required to allow the business to continue its research.

The following paragraphs discuss three sources of funds available to Derma.

1.1 Borrowing

Borrowing from a bank is a normal source of finance for many businesses. The key challenge that Derma faces is providing confidence to a lender that the loan would be repaid. Even if Derma is able to provide positive cashflow projections for the term of the loan, the bank is likely to seek additional security in case the cashflows do not occur or in case Derma defaults on the loan repayments. The nature of Derma's business (negative cashflows in the short to medium term; low net assets of £1.3 million) means that it has limited security to offer. The CEO has indicated that she is willing to offer her private dwelling as security. This may be acceptable to the lender but it creates the risk that the CEO could lose her home if Derma is unable to repay the bank loan.

Loan repayments are a cash outflow from the business and must be paid to the lender in accordance with the terms agreed (interest rates, period, instalments). It may be possible to agree flexible terms to allow for repayments to be deferred or for interest only payments to be made. This could help ease cashflow issues but there is likely to be an additional cost attached to flexible terms which Derma would have to pay eventually.

The lender may attach conditions to the loan which, if breached, could result in a requirement to repay the outstanding loan early. This could have a catastrophic impact on Derma's financial viability.

Apart from the obvious benefit of raising funds, the main advantage of borrowing is that it avoids changing the ownership structure. This means that the CEO would still have effective control of the board.

1.2 Rights issue

Raising funds by issuing shares has the major benefit that there is no obligation to pay any returns to the shareholders out of cash balances. Shareholders own a stake in the company and they can realise that stake by selling their shares or when the company is wound up. Dividends are only payable if distributable profits are made and so, compared to borrowing, equity finance does not create an expense in the profit and loss account.

A rights issue is where existing shareholders are given the opportunity to purchase more shares in a business in proportion to their existing holdings. This has the advantage of raising funds without bringing in other shareholders, who would dilute the ownership of the company, reducing future returns to the current shareholders. The current shareholders have not yet received a dividend from Derma and so this may be important to them.

A value for Derma would be needed to help determine an appropriate price at which the rights issue should be sold.

New shareholders might also seek to change Derma's business strategy. However, it appears that none of the current board members is able to invest further in Derma and assuming that additional shares are purchased by the other major shareholder, Hywell Jones, this would result in a change in the ownership structure. It is likely that the CEO would lose overall control.

The implications of this are significant. Hywell Jones' motivation for investing in the company is likely to be different to that of the board. If he has greater control, this could lead to conflict with the board and a possible change of strategy. A change of strategy could result in the departure of key members of staff, particularly if their research goals are not supported.

The company is loss-making and Hywell Jones will have made a greater investment with no short-term financial returns. He may be more inclined to promote options to provide quick financial returns in future.

It is possible to create different classes of shares (e.g., shares without voting rights). And this could be one way of mitigating some of the adverse implications of changing the ownership structure. However, the option to create different classes of shares might not be supported by the existing shareholders.

1.3 AIM market

AIM is the London Stock Exchange's international market for smaller growing companies. There are no thresholds for capitalisation and limited regulation. AIM stocks tend to be volatile high-risk/ high-reward investments. Many small biopharmaceutical companies raise funds on the AIM market.

A prospectus would be required and there would be an increased burden on the administration function of Derma.

Investors tend to be large institutions or wealthy individuals. They are likely to only be interested in maximising their returns and would have less interest in the long-term future of the company. This means that the previous points about dilution of ownership and the possible implications for Derma's strategy apply here too.

1.4 Recommendation

The imperative for Derma is to secure the successful commercialisation of its main product, RetinX6 and the associated cosmetic product, Peau. This would generate profits for Derma and provide resources for investment in other products.

Derma is at a stage where the significant investment in these products has attracted the interest of major companies and there is potential for Derma to move into a profitable position in the medium term. However, there is a risk that the clinical trials of RetinX6 do not produce positive results and the company may not achieve its goals. Consequently, the preferred funding option depends upon the level of confidence that the board and the CEO have in the future success of RetinX6. It also depends upon the importance the CEO attaches to retaining overall control and the nature of the relationship between the board and Hywell Jones.

We have speculated about the possible motivation and future actions of Mr Jones but the CEO and board may have a better insight into his future intentions.

Clifton LLP recommends that the AIM option is not pursued since that would bring added complexity to Derma's funding position without any added benefits at this stage. We think that the business loan and rights issue are both viable options which will secure funding for Derma; indeed, a combination of both could be possible.

We have set out the pros and cons of these options for the CEO to discuss with the board. Our inference is that the loan is the CEO's preferred option and if the board is confident about the success of RetinX6 and Peau, Derma should be in a position to repay a business loan. If the board wishes to explore this option more fully, we would be happy to assist with the necessary financial projections and business plan for the lender. The CEO might wish to consider compensation from Derma in return for offering her home as collateral.

2. Control and other implications of contracting with Chemtest

The contract with Medsanta is critically important to Derma. Huge investment has gone into developing RetinX6 and the contract with Medsanta is a major opportunity to bring the drug to market. As well as the clinical benefits, this should generate significant financial returns for Derma, providing returns to the shareholders and funds for future research and development. However, none of these benefits can occur unless the clinical trials confirm that RetinX6 is safe and effective.

Clinical trials are a highly regulated area. Trials have to follow strict protocols and they are lengthy and resource intensive. Derma does not have the capacity or experience to be able to carry out clinical trials on their own. Therefore, it is appropriate to enter into an agreement with an experienced third party to carry out the trials on their behalf.

2.1 Outsourcing

From the available information, Chemtest appears to have the experience and capacity to carry out this work on behalf of Derma. Failure to carry out the clinical trials properly or on time could result in a claim from Medsanta for breach of contract resulting in a loss of the IP for the drug. This means that Derma needs to manage the risks associated with outsourcing the clinical trials carefully.

It would be worth finding out more about Chemtest's claimed above average success rate. If this claim is correct, Derma should seek assurance that quality standards have been met. Before entering into an agreement with Chemtest, Derma should seek confirmation that Chemtest complies with all relevant regulatory standards. Clifton LLP could provide assistance by reviewing Chemtest's financial statements for any areas of concern relating to their financial viability. Separate assurance would be required on Chemtest's quality standards and compliance with regulations.

Chemtest's proposal to accept shares in return for their services is an indication of confidence in Derma and could be encouraging for future investors. This method of funding also puts less strain on Derma's current financial resources.

However, there are some disadvantages. While payment by results is an incentive to carry out the testing on time, it could be an incentive to cut corners. It would be worth discussing with legal advisers' appropriate clauses for the contract which could mitigate that risk.

The value of the shares would be based on the value of the service provided by Chemtest. Derma does not trade its shares and would need to decide on the value of the shares.

2.2 Ownership/ Control

Chemtest would be become an ordinary shareholder. Although voting rights would not vest until the final instalment, this means that Derma would have another shareholder to deal with in future. We do not have information about Chemtest's motivation for seeking payment by shares. This could be a sign of confidence in Derma however, it is not clear what Chemtest's longer term intentions are. It would be worth discussing this with Chemtest and carrying out some investigations into Chemtest's investment strategy. This is something that Clifton LLP could assist with.

The value of the shares results in a change of ownership structure and dilutes the value of the shares of the current shareholders: For example, the CEO's holding would reduce from 53% to 44%. This means that the other shareholders, acting together, could remove the CEO.

Name	No shares	% holding (previous)
Dr Tanya Silvertree	800,000	44 (53.3)
Hywell Jones OBE	300,000	17 (20)
Professor Gilbert Gendron	200,000	11 (13.3)
Dr Adina Stasinakis	200,000	11 (13.3)
Chemtest	300,000	17 (N/A)

The change in ownership structure and the resulting dilution of value could be unattractive to the other shareholders too.

Thinking longer term, allowing Chemtest to hold a significant stake in Derma could create difficulties if Derma wishes to contract with another company to carry out clinical testing in future if that decision is not supported by Chemtest.

Recommendation

Research should be carried out into Chemtest's investment strategy and track before entering an agreement. This will ensure there is evidence to support their track record and all relevant laws are complied with. If this review is not satisfactory Derma should not enter into this agreement and should seek alternative solutions.

The CEO should make the board aware of the implications for their ownership and control if Chemtest is paid in shares.

The future strategy of Derma entering contracts with other companies would need to be clear.

3. Marketing Peau

The approach by Skindeep gives Derma the opportunity to leverage the investment in RetinX6 through the development of a face cream for the cosmetic market.

Derma has three options:

- Option 1: sell Peau to Skindeep for £1.2 million;
- Option 2: agree a licence fee with Skindeep of £15 per unit with a minimum return of £45,000 a year for five years, with an option to renew; or
- Option 3: market Peau directly.

3.1 Option one: Financial considerations

Based on the £15 fee per unit provided by Skindeep in option two, the offer of £1.2m suggests that they would expect to sell the equivalent of 80,000 units[1].

This would raise a significant sum of money (£1.2 million) which can be invested in other projects and/ or used to provide dividends to the shareholders.

The revenue raised might solve the current need to raise funds (as discussed in section 1). It also mitigates the financial risks associated with the inherent uncertainty of research projects. Some of the current projects might not pass the clinical testing phase and/or the development period might be extended. The upfront payment of £1.2 million from Skindeep would provide resources that could be used to cover unforeseen costs.

The income from the sale of rights might be much less than the future revenue generated from the direct marketing of Peau (option 3).

3.2 Option two: Financial considerations

Based on the £15 fee per unit provided, Skindeep are suggesting a minimum of 3,000 units of sales a year[2] under this option. Skindeep have based their payment in option one on projected sales over a 10-year period. This means that they must be assuming an average of 8,000 units each year[3]. Therefore, there is potential for option two to raise between £45,000 and £120,000[4] a year for Derma.

This option raises a smaller guaranteed amount of money (£45,000 a year) compared to option one, although it could raise much more (£120,000) if Skindeep's own projections are correct.

[1] £1.2 million/£15 = 80,000 units.
[2] £45,000/£15 = 3,000 units
[3] 80,000/10 = 8,000 units
[4] 8,000 x £15 = £120,000

If the cream is more successful than estimated by Skindeep, there could be scope to negotiate a higher licence fee and /or minimum payment after five years. However, the licence fee might be much less than the future revenue generated by Peau in option 3.

Although the annual licence fee is unlikely to solve short-term resourcing needs entirely, it would reduce the amount required and reduce the risks associated with a loan secured on the CEO's home.

Option three: Financial considerations

On a cost-plus basis, assuming Derma can achieve the market norm of 80% profit on a £50 product, Derma could receive £40 a unit. If Derma is able to achieve the sales figures suggested by Skindeep in options one and two above, this means that option three could generate £120,000[5] to £320,000[6] a year. This is greater than or equal to the income generated by option one, spread over 10 years.

However, considerable upfront investment will be required, and it could be some time before profits are generated. The costs of manufacturing, marketing and production have not been estimated or included in the funding requirement discussed in section one.

3.3 Non-financial considerations

Option one

Derma's business model means that it needs to have projects at different stages of development to attract motivated scientists and to allow for the long R&D time and potential failure rate inherent in its products. Option one gives Derma the "strategic space" to concentrate on new research projects. It also provides Derma with a track record that could encourage other investors for future projects.

However, Derma will lose control of the product and will not have any say in its future development.

Option two

Similar to option one, this option gives Derma the 'strategic space' to concentrate on new research projects

Skindeep might not want to renew the licence in future and Derma could be left with an unsuccessful product. While under licence, Derma could learn from Skindeep's approach to marketing the cream and use this acquired knowledge, if it takes over control of the product in the future. It might be possible to continue to use Skindeep's distribution networks in future.

Derma will lose control of the product during the licence period.

Skindeep's involvement provides Derma with a track record that could encourage other investors for future projects.

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[5] 3,000 x £40 = £120,000
[6] 8,000 x £40 = £320,000

The cosmetic market is highly competitive. There is a risk that Skindeep could go out of business meaning that option two could become unavailable. If option two is preferred, Derma should carry out research into the viability of Skindeep.

Option three

Skindeep is a well-established name in the cosmetics industry with a number of successful brands in its portfolio. They also have established distribution networks: airports; department stores and large pharmacists. Their interest in Peau is a sign that Derma has created a marketable product but the key challenge that Derma faces is how to bring the cream to market without the experience and established distribution networks Skindeep enjoys.

Derma would have to find the resources and the expertise to produce and sell the cream. They do not have the expertise and networks that Skindeep do. Strategic time would be spent on Peau at the expense of other projects, but Derma will retain control over the future development and pricing of the cream.

Face cream is a competitive market and brand loyalty is strong. Derma might not be able to encourage sufficient customers to switch to Peau.

However, if Derma is able to market Peau successfully, it has the potential to make significant financial returns. In future, it might be possible to build on the success of Peau to develop a range of creams aimed at different markets e.g., with added sunscreen, tinted creams etc.

There are many issues to consider about the production and distribution of Peau e.g., the size and style of the packaging, but in terms of marketing, Derma needs to consider the following issues:

- Target market:

  There is already a huge choice of face creams available to customers and so Derma needs to identify its particular market niche. Creams are segmented according to skin type, which is often associated with the age of the customer, the properties of the cream e.g., anti-wrinkle and by price.

  Derma has already decided that Peau should be marketed as a luxury brand to women over the age of 40 as an anti-ageing cream because the active ingredient is a modified form of RetinX6, which is assumed to have cell renewal properties. That means that data about that group of potential customers should be collated: number of women over the age of 40 by geographic area; average income; average spend on beauty products. Derma could employ a market research company to provide this data for them.

- Marketing risks include:

  - a risk that the potential market for Peau is not created by appropriate publicity and pricing; and

  - a risk that Peau is not available for sale in locations that suit the target market.

If Derma wishes to proceed with option three, Derma should commission external advice on the marketing strategy. This should include advice on pricing and market segment e.g., socio-demographics. Experienced marketeers should be employed to implement the strategy.

The market research company could also carry out surveys or focus groups with potential customers to give Derma information about what they look for in a face cream and how much they would be willing to pay. This will help inform Derma's pricing and marketing strategies.

- Competitors

It would be helpful to understand the competition. This will also help inform Derma's pricing and marketing strategies. There are several brands which target the same market segment and Derma could try and obtain information about their market shares as well as their pricing and publicity campaigns etc. Some of this information will be available from annual reports but market researchers could provide this kind of analysis too.

- Pricing

The competitor analysis will also give Derma information about the price of competing creams. It is common for face creams to be subject to special offers. Derma should include the loss of revenue associated with discounts in its financial projections.

- Manufacturing

Derma does not currently manufacture any products and will need to contract for this service. This means that Derma will need to manage the risks that:

  - The product does not meet quality standards;
  - production timescales are too long;
  - the estimates of production costs are too low; and
  - the product cannot be produced in sufficient quantities (too much or too little).

Derma should only contract with experienced manufacturers who are able to provide assurances about quality/cost/quantity/production times. Ensure the contract includes adequate incentives and penalties to encourage good performance/discourage service failures.

3.4 Recommendations

Derma has reached an important stage where the investment in research and development has the potential to generate significant returns in the short to medium term. As requested by the CEO, this paper explores some of the issues in order to assist decision making.

Option three for marketing Peau offers the highest potential returns but it also carries the highest risks. Skindeep already have established production and distribution networks and Derma would have to invest in creating those. It is likely that Derma would not generate profits from Peau in the short term. Therefore, the board should consider whether it has the capacity to accept the risks associated with marketing Peau in return for potential future returns.

A key consideration is development funding. Development funding would be required for Peau if Derma wishes to pursue option three. As discussed in section 1 of this briefing note, Derma already has a funding requirement for working capital and although Skindeep's offer is a positive sign of market confidence, given Derma's overall weak financial position, it may be difficult to obtain sufficient development funding on its own behalf.

Option 2 offers a possible solution in that Derma could use the licence fee income from Skindeep in order to develop its own plans for producing and distributing Peau at the end of the licence period. Over the five-year period, Derma can be confident of raising a minimum of £225,000[7] but might raise up to £600,000[8]. It may be possible to leverage the agreement with Skindeep to raise a bank loan specifically for Peau.

Derma could consider setting up a subsidiary company in order to ring-fence the funding and costs of Peau. This would provide transparency about the costs and income associated with Peau and could help Derma manage the risks associated with Peau in a way that does not impact on the rest of Derma.

Our recommendation is that Derma should not proceed with option three because it does not have the financial capacity or operational expertise to market cosmetics at this stage.

Derma is seeking short-term funding to support its development programme and option one could provide all or most of the cash injection that is required. However, option two has the potential for greater returns and if the immediate cashflow problems can be resolved, option two may be the best option to pursue.

We recommend that further work is carried out on the financial impact of options one and two for marketing Peau on the total funding requirements for Derma, as discussed in section 1.

We would be pleased to assist with this exercise.

[7] £45,000 x 5 years = £225,000
[8] £120,000 x 5 years = £600,000

REPORT TO THE BOARD

Title Page: Report on Strategic Options for the Board of Derma prepared by Clifton LLP on [date]

Contents:

Introduction:

Derma has reached a crucial point in its development. Medsanta are claiming the right to acquire the intellectual property (‘IP’) of RetinX6 for £1 million due to breach of contract. The board have also received an offer from Medsanta to buy the whole business for £2 million.

An alternative option has been suggested by Hywell Jones who is interested in supporting the short-term working capital needs of the company if it is viable without RetinX6.

The purpose of this report is to provide the board of Derma with information to assist them to decide which strategic option to pursue.

Executive Summary:

- Derma has severe cash flow problems and needs to act urgently to resolve them.
- The sale of RetinX6 to Medsanta should resolve short term funding requirements.
- We conclude that Medsanta's offer is less than the true value of Derma. Medsanta has offered £2 million for the IP of the whole company. We have valued the company between £3.5 million and £5 million.
- The CEO's leadership and expertise are crucial to the future viability of Derma. Derma should take steps to secure the continued employment of the CEO.
- If the CEO transfers to Medsanta, the board should negotiate the sale of the rest of the business using our valuation to negotiate an increased selling price. Selling the company is likely to secure the successful marketing and sales of RetinX6 as well as securing returns for shareholders and the employment rights of existing employees.
- If the CEO stays with Derma, the board should enter into discussions with Hywell Jones about any short-term funding required in addition to the receipt for RetinX6.
- The board should carry out further work to confirm the assumptions set out in this report.

1. Context

Background

Derma entered into an agreement with Medsanta in Yr. 37 to fund some of the research into the medical application of RetinX6. Under the terms of the agreement, Medsanta has the right to purchase the IP for RetinX6 if the terms of the agreement are breached. The revelation that Chemtest, who carried out the clinical testing under contract to Derma, used live animals in their testing protocols represents a breach of contract.

Medsanta has valued the IP of RetinX6 at £1 million and they have offered to buy the whole company for £2 million. They are also keen to retain Derma's Chief Executive ('CEO') to oversee the development of RetinX6.

The local enterprise company ('LEC') commissioned independent valuers who have valued the whole company IP at £4 million and the IP for RetinX6 alone at £1.5 million. Hywell Jones has expressed an interest in providing short-term funding to Derma if the company is financially viable without RetinX6.

Derma is currently trading at a loss and cash flow is a serious problem. This raises concerns about the future viability of the business. Consequently, Derma has an urgent requirement to address its financial position. However, if Derma is able to complete its research on the other three projects in its programme of development, there is a real prospect of financial gain in the medium to longer term.

We have identified the following strategic options:

- Option 1: Sell the whole business to Medsanta; or

- Option 2: Sell RetinX6 to Medsanta and retain the rest of the business.

The following section discusses these two options.

2. Strategic Options

Option 1: Sell the whole business to Medsanta

Medsanta is a willing buyer for the business and their offer of £2 million would provide existing shareholders with £1.33[9] per share as long as Medsanta is willing to take over all of the existing assets and liabilities, including any corporation tax liabilities.

If Derma is acquired intact, staff would be protected by the Transfer of Undertakings Protection of Employment ('TUPE') legislation. This would entitle them to transfer to Medsanta on the same conditions of employment that they currently enjoy. This option might be attractive to staff because it gives them the opportunity to work in a large successful company with good career prospects.

It is unknown whether Medsanta would be willing to continue research into the other projects in Derma's research programme. This could have implications for the retention of staff and might require the repayment of third-party funding which has been received for these projects. However, these risks would transfer to Medsanta.

The LEC has valued the IP of Derma at £4 million including the IP of RetinX6 at £1.5 million. This suggests that the £2 million offered by Medsanta (including a valuation of £1 million for RetinX6) is less than the company is worth. It may be possible to use the LEC's valuation to negotiate a higher price.

Option 2: sell RetinX6 to Medsanta and retain the rest of the business

The other projects are at various stages of development and Appendix 1 sets out our assessment of the viability of this option. We explored two scenarios and the results are set out in the following table:

Scenario	Valuation
Scenario 1: all products achieve the highest contribution	£5 million
Scenario 2: all products achieve the lowest contribution	£3.5 million

We have calculated a range of plausible present values for Derma from £3.5 million to £5 million. These valuations are based on the assumptions of costs and income set out in Appendix 1.

Scenario 1 is the best-case contribution, and this uses the most optimistic assumption about profitability. Scenario 2 is the worst-case contribution, and this uses the most pessimistic assumption about profitability. The worst-case valuation is close to the valuation of the whole company intellectual property by the LEC, which was £4 million.

[9] £2m/1.5m = £1.33 per share

Deficits

Based on the assumed cash flows for scenario 2, the projects will generate a profit over the ten-year period but in years two to four, deficits will occur; £81,000 in year two rising to £181,000 in years three and four. Assuming that Derma receives at least £1 million from the sale of RetinX6 to Medsanta in year one, the deficits should be covered by this income. Clearly, if any of the assumptions prove to be optimistic then the size of the deficit would increase. Also, the total cash surplus to date at the end of year four is only £8,000. There is little capacity to absorb any adverse variations in any of the assumptions.

Assumptions

The assumptions we used are based on discussions with the CEO. We have not spoken to any of the staff at this stage or carried out any other validation of the projected cashflows for the current portfolio of projects over a ten-year period from Yr. 38/39. These figures are estimates and the further into the future we look, the less certain the figures are. We have valued the company in today's money and if costs go up by more than the rate of inflation, this would reduce the net cashflows.

Risks

The inherent risks, in forecasting sales of products under development, need to be highlighted.

It has been assumed that all of the current projects will make it to market. There is a risk that this will not happen. The success rates for new drug development are low, with one American study suggesting that they can be as low as 12%. If any of the drugs in the portfolio fail to reach production, the valuation would of course be adversely affected.

The sales volumes and sales prices are estimates and there is a risk that the actual sales income will be lower. Consequently, the valuation we have produced should be considered as indicative.

Option two has the potential to create a significantly greater financial return for shareholders than option one. We would recommend that further work is carried out to test the assumptions.

Key role of CEO

Another important factor is the future role of the CEO. Medsanta are keen to retain her connection with the RetinX6 project and the sale of the whole IP may be conditional upon this. If Derma rejects the offer for the whole IP, the IP for RetinX6 will still transfer and it is likely that Medsanta will make an attractive offer to the CEO to transfer too.

If the CEO leaves Derma, this will create a significant gap in the leadership of the company and could have an adverse effect on other projects because of her central role in the research programme. There is a risk that Derma will no longer be viable if the CEO leaves.

Furthermore, RetinX6 is a significant part of the current business and it is possible that other members of staff could claim a right to transfer to Medsanta under the TUPE legislation. Legal advice on employment rights will be required.

3. Other Considerations

If the board chooses to sell, 75% of votes are required for a special resolution. The whole board could meet the threshold since they account for 80% of the votes. None of the shareholders could pass the resolution alone and so negotiation and compromise may be required. An individual shareholder could consider petitioning the court for "just and equitable winding up" but that is unlikely to be as beneficial financially as options one and two.

Consultation with staff will be required if they are at risk of losing their jobs. This is a complex area and the LEC may be able to offer specialist legal advice and / or practical assistance.

Given the nature of the work of Derma, the board should consider taking steps to secure Derma's intellectual property to make sure that it is safeguarded. Any loss of intellectual property could affect the sales value for option one or the ongoing value of the business in option two.

Similarly, the board should carry out a risk assessment to identify any other areas such as data security which will require attention during any transfer period.

4. Conclusions

The valuation placed by Medsanta on Derma is around half of the value assessed by the LEC and also by Clifton LLP. The board now has information which it could use to try and negotiate a higher price for Derma from Medsanta, or the board could decide to remain in business.

Medsanta is likely to take action to enforce its contractual rights to acquire the IP of RetinX6 and so Derma will lose one of its major products. Derma has short-term cash flow problems, but the portfolio of current projects has the potential to generate significant profits. The sale of RetinX6 should generate enough income to support the continued development of the other projects. Hywell Jones has indicated that he will provide working capital finance provided that Derma is viable without RetinX6.

It is possible that Medsanta will seek to employ the CEO in order to complete the development of RetinX6. If the CEO left Derma at this stage, the future of the company and its remaining research programme would be jeopardised due to the loss of her vital knowledge and expertise. It is crucial to clarify the future role of the CEO. The continued employment of the CEO is in the best interests of Derma.

The board should seek legal advice about the potential sale at the earliest opportunity covering the sale process, the employment rights of staff and intellectual property rights.

APPENDIX 1

Projected cash flows Yr. 38/39 to Yr. 47/48

Assumptions

Projects	Peau	HA156	BU39
Years to complete	1	4	8
Costs to complete £'000	400	600	800
Other income £'000		50	100 (for 2yrs)
Fixed costs £'000	16	90	240
Variable costs £	6	20	3
Marketing costs £	2	2	1
Sales:			
a) Units ('000)	2	8	15
Price £	50	100	30
b) Units ('000)	4	20	30
Price £	40	60	20

Note: financing costs have been ignored as immaterial

Contribution to fixed costs excluding probabilities

Projects	Peau	HA156	BU39
Contribution A (£'000)	84[10]	624[11]	390[12]
Contribution B (£'000)	128[13]	760[14]	480[15]

[10] (£50-£6-£2) x 2,000 units = £84,000
[11] (£100-£20-£2) x 8,000 units =£624,000
[12] (£30-£3-£1) x 15,000 units = £390,000
[13] (£40-£6-£2) x 4,000 units = £128,000
[14] (£60-£20-£2) x 20,000 units = £760,000
[15] (£20-£3-£1) x 30,000 units = £480,000

Scenario 1: Best Case Contribution

	Yr 38/39	Yr 39/40	Yr 40/41	Yr 41/42	Yr 42/43	Yr 43/44	Yr 44/45	Yr 45/46	Yr 46/47	Yr 47/48
Inflow	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**
Net contribution (B)										
RetinX6										
Peau		128	128	128	128	128	128	128	128	128
HA156					760	760	760	760	760	760
BU39									480	480
Other income										
RetinX6	1,000[16]									
HA156	50	50	50	50						
BU39	100	100								
Total	1,150	278	178	178	888	888	888	888	1,368	1,368
Outflow										
Project costs										
Peau	400									
HA156	150	150	150	150						
BU39	100	100	100	100	100	100	100	100		
Fixed costs										
Peau		16	16	16	16	16	16	16	16	16
HA156					90	90	90	90	90	90
BU39									240	240
Other costs										
Admin[17]	49	49	49	49	49	49	49	49	49	49
Total	699	315	315	315	255	255	255	255	395	395
Total net income/(expenditure)	451	(37)	(137)	(137)	633	633	633	633	973	973
Cumulative income/(expenditure)	451	414	277	140	773	1,406	2,039	2,672	3,645	4,618
Terminal Value										7,784[18]
DCF 10%	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855
	410	(31)	(103)	(94)	393	357	325	295	413	
Terminal value										3,001
DCF	**4,966**									

Note: Taxation has been excluded.

[16] Sale of RetinX6 to Medsanta
[17] Average admin costs from paper 1 page 12
[18] Calculated by multiplying year 10 value by 8 to represent the longer term cashflow

Scenario 2: Worst Case Contribution

	Yr 38/39	Yr 39/40	Yr 40/41	Yr 41/42	Yr 42/43	Yr 43/44	Yr 44/45	Yr 45/46	Yr 46/47	Yr 47/48
Inflow	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**	**£'000**
Net contribution (A)										
RetinX6										
Peau		84	84	84	84	84	84	84	84	84
HA156					624	624	624	624	624	624
BU39									390	390
Other income										
RetinX6	1,000[19]									
HA156	50	50	50	50						
BU39	100	100								
Total	1,150	234	134	708	708	708	708	708	1,098	1,098
Outflow										
Project costs										
Peau	400									
HA156	150	150	150	150						
BU39	100	100	100	100	100	100	100	100		
Fixed costs										
Peau		16	16	16	16	16	16	16	16	16
HA156					90	90	90	90	90	90
BU39									240	240
Other costs										
Admin[20]	49	49	49	49	49	49	49	49	49	49
Total	699	315	315	315	255	255	255	255	395	395
Total net income/(expenditure)	451	(81)	(181)	(181)	453	453	453	453	703	703
Cumulative income/(expenditure)	451	370	189	8	461	914	1,367	1,820	2,523	3,226
Terminal Value										5,624[21]
DCF 10%	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855
	410	(67)	(136)	(124)	281	256	232	211	298	
Terminal value										2,168
DCF	**3,529**									

Note: Taxation has been excluded.

[19] Sale of RetinX6 to Medsanta
[20] Average admin costs from paper 1 page 12
[21] Calculated by multiplying year 10 value by 8 to represent the longer term cashflow

Email to Husain on Research & Development Tax Relief

To: Husain
From: Alex
Date: December Yr. 38
Subject: Derma: Research & Development Tax Relief

Hi Husain,

I refer to our recent discussion about Derma's claim for R&D tax relief. Here are my comments on the information provided by Tanya Silvertree.

There is an important issue given the current situation. R&D claims should only be made if the company is a going concern and this is something that needs to be established given the precarious financial position of Derma.

All of the R&D expenditure has been treated as eligible, but we know that some costs will not be eligible for tax relief. The main issue is that the work on RetinX6 for Medsanta is being done under contract and this is not eligible for the SME relief. Based on the timesheets Tanya Slivertree provided, 40%[22] of the scientific researchers' time was spent on RetinX6. Most of the research costs are staff costs and so a significant proportion of the costs could be ineligible.

The work for Medsanta may be eligible for the Research & Development Expenditure Credit (RDEC) if Medsanta are not eligible to pay UK taxes. RDEC is worth 13% of the eligible expenditure.

Also, the credit is based on the lower of the trading loss or qualifying R&D expenditure. In the current claim, the trading loss is the key figure and it is possible that an adjusted R&D figure will still be higher than the trading loss.

Derma receives subsidised rent for their laboratories. This might be considered as state aid and therefore ineligible for R&D tax relief. It could be eligible for RDEC.

I recommend the following course of action:

- Discuss the claim with Tanya to understand the constituent figures better. A more detailed breakdown of the R&D costs showing how they have been allocated is required but it is already evident that too much has been included as eligible R&D expenditure.

- If the claim is overstated, recalculate the current claim and review previous claims to identify any amounts wrongly claimed.

- Estimate possible interest and penalties that could be payable to HMRC.

[22] Tanya's time on RetinX6 as a % of her total time: 20/50 = 40%

- Recommend that contact is made with HMRC to alert them to the issue. It may be possible to negotiate the timings and amounts of money due to HMRC.

- Consider the implications for the financial statements: provide for payments to HMRC; possible contingent liability for some of the payments.

- Report to the full board on this situation so that the NEDs are aware of it.

I hope these comments are useful and please let me know if you would like me to do any further work on the claim.

Kind regards,

Alex

Cybercrime presentation and speaker notes

Cybercrime: how to manage the risks

Presentation by Clifton LLP for Derma Ltd

Speaker notes:

- Cybercrime is the umbrella term used to describe crimes perpetrated using a computer as the weapon or tool. Over 50% of all reported crime in the UK is cybercrime. And this figure is forecast to grow as computing power increases and as criminals become ever more inventive.
- We all use computers in our everyday and working lives. We are all vulnerable to cybercrime.
- Recently Derma was the victim of a cybercrime when its firewall was breached. Fortunately, no data was lost but the risks are still present.
- This presentation will cover some of the common risks of cybercrime that Derma faces. Clifton LLP regularly advises clients on ways of managing the risks of cybercrime and some steps Derma can take to protect its business against this major business risk.

What are the main risks that Derma is exposed to?

- Business interruption
- Loss of data
- Loss of assets eg IP
- Extortion
- Device security

Speaker notes:

- Denial of service attacks where large numbers of computers are recruited to bombard a company’s website to overload its system and prevent genuine customers from accessing it. Derma does not provide services to the general public and this is less likely to be a risk, however, other attacks can effectively lock Derma’s systems (e.g. the recent incident and prevent staff from carrying out their work)

- Breaking through firewalls to access and steal company data. This is a particular concern for Derma given the confidential nature of some of its research. The recent incident occurred because Derma’s firewall was breached

- Using unauthorised access to company systems to steal assets e.g., transferring money from company to personal accounts or, in Derma’s case, stealing research data

- Making systems and/ or data inaccessible to the company unless the company pays a ransom

- Unauthorised hacking of company systems

What tools are used?

- Malware eg viruses, ransomware
- Phishing
- Identity theft
- Hacking
- Exploit weaknesses in mobile device security

Speaker notes:

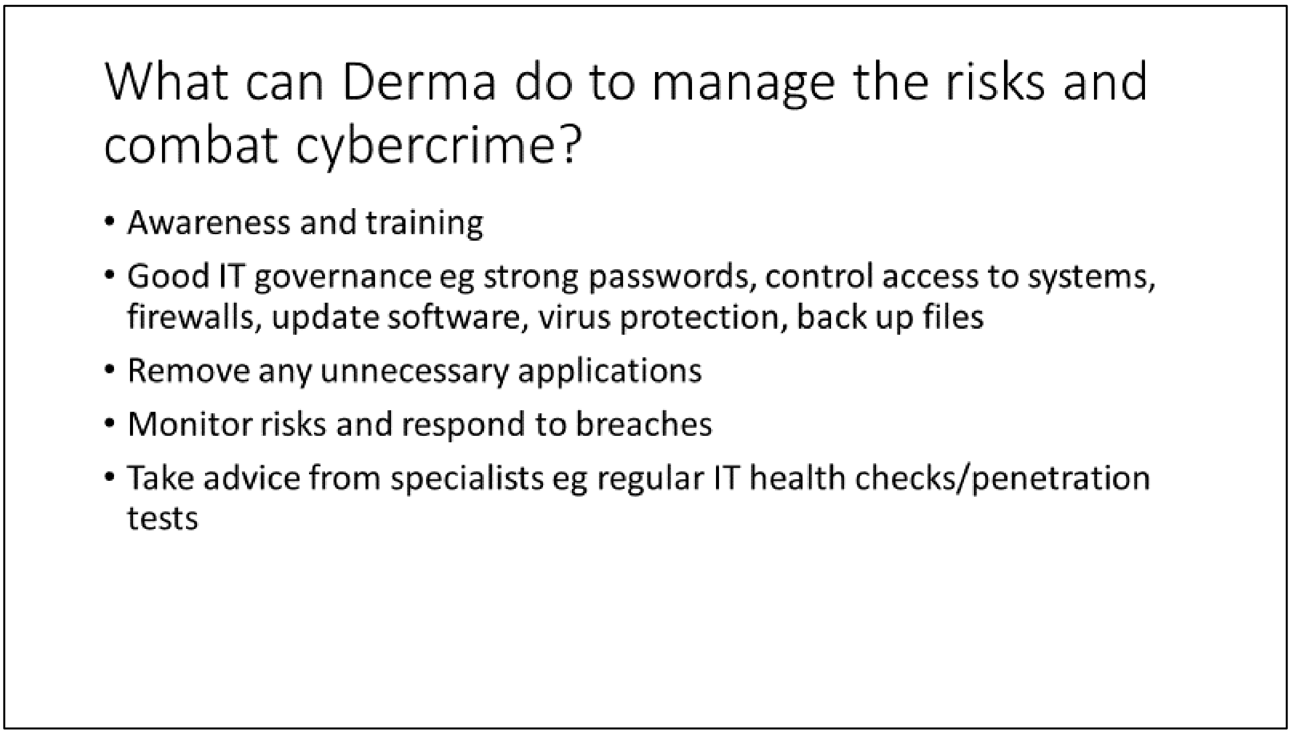
- Software introduced by the criminal to access the company's systems/ destroy the company's systems; embedded in emails or attachments; downloaded from insecure or infected sites. This is the problem Derma had

- Plausible looking emails seeking company details or assets e.g., spoof supplier invoices

- Using social media/ public records (e.g., 'Who's Who' to gather data to impersonate someone)

- Weak passwords, shared passwords, passwords called 'password', out of date virus protection

- Companies often have strong controls over IT systems but what about remote access? Mobile phones? USB sticks



Speaker notes

- Regular training to keep abreast of new threats. This is everyone's responsibility – not IT
- Good governance and policies. Pay attention to the General Data Protection Regulations Clear IT use policy signed by all staff. Back up to the cloud or store back-ups off site
- Review attempts to breach security and any IT misuse by staff
- Annual penetration tests recommended
- Document annual compliance reviews.

Final thoughts

- The only way to eliminate the risks of cybercrime altogether is to stop using computers. That's not going to happen but by following the good practice described and by managing the risks, you can be confident that you have reduced the risks as much as you can.
- Clifton LLP has helped many clients by carrying out a thorough health check and if you would like more on this service, please feel free to contact us

Ethics

To: Husain@Clifton.com
Date: December Yr. 38
From: Alex@Clifton.com
Subject: Derma: draft email to ethics partner

Hi Husain,

As requested, please find attached a draft memo to the Ethics Partner. Please let me know if there is anything else that I can do to assist you with this.

I've also attached a draft presentation on cybercrime and I would be pleased to discuss this with you.

Kind regards,

Alex

To: Ethics Partner
From: Husain
Subject: Derma: Ethical Issues

Derma is a new client and over the past few months we have gained a better understanding of how the company works. Some of the issues that have emerged have raised concerns about the integrity of the client and I would welcome your advice on the appropriate actions we should take.

The company is a small bio pharmacy company based in Bristol. It is currently making an annual loss but some of its products are close to being brought to market. It appears likely that the company will move into a profit-making situation in the short to medium term. This means that there is an incentive for the company to do what it can to ensure the success of its products.

Here are the issues we have identified:

Due Diligence on contracted third party

The Chief Executive and founder entered into a contract with a third party (Chemtest) to carry out clinical testing on one of the products (RetinX6) even though that Chemtest claimed results significantly better than the industry average. No due diligence was carried out to substantiate the claims of Chemtest and so the risk that they manipulate results to boost success rates was not considered. This may have been poor commercial judgement by the Chief Executive but given her experience, I would have expected her to challenge Chemtest's claim. There is a possibility that she may have been willing to accept a less rigorous testing regime (if that indeed is what produces Chemtest's results) in order to achieve positive results for the RetinX6 product. Taken together with the Chief Executive's recent behaviour, this gives me some concerns about her integrity.

We recommended that Derma should carry out due diligence and so from our perspective, we have demonstrated integrity and professional behaviour.

Animal testing

The chief executive was also aware that Chemtest routinely carried out testing on animals. She did not disclose this to the board even though Derma had a contract with another company (Medsanta) that has a public stance against animal testing. She should have been aware that animal testing would jeopardise the contract. This is potentially damaging to our reputation. Questions could be asked about our professional competence and due care, but we had no prior knowledge of Chemtest's practices nor were we commissioned to review the contract between Medsanta and Derma or Derma and Chemtest.

When the animal testing came to light, Medsanta exercised their contractual rights to claim the intellectual property of RetinX6. They also offered the chief executive a financial package to complete the testing on the product. If the chief executive accepts the offer, the company will no longer be viable. The chief executive has not indicated that she will put the interests of the company ahead of her own personal interests, indeed she has given us cause to think that the opposite will be true.

R&D tax credit

Derma is suffering from poor cash flow. The company is potentially eligible for R&D credits and the chief executive has prepared a claim for the tax that contains clear errors causing it to be overstated.

We have been offered a contingent fee for the preparation of the claim. Our ethical principles are being challenged by this request. Not only are professional competence and due care relevant here, but our duty of confidentiality with respect to the client and HMRC is also challenged. We should not submit the claim as it stands, and we should not accept the contingency fee.

Going concern

There is a clear risk that the company will not continue to be a going concern. Our fees are also at risk, creating an independence risk.

CEO

The company was originally set up to commercialise the main product (RetinX6). It seems to me that the chief executive is focussed on bringing her life's work to market and does not always observe ethical business practices. Her lack of integrity carries many risks for us. We may be seen as compromising our own integrity and professional behaviour if we continue to work for Derma.

My recommendation is that we should sever our relationship with Derma, but I would welcome your advice.

Please let me know when you are available to discuss this.

Kind regards,

Husain