Trinity Delta

Outlook

7 June 2017

MaxCyte

From strength to strength, with CARMA expansion

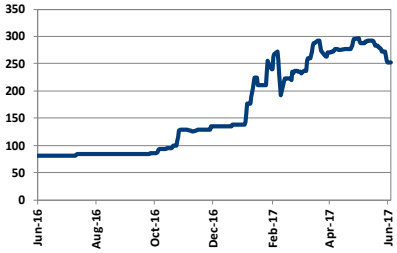
MaxCyte completed an exceptional first year as a publicly-listed company with a £20m capital raise at a slight premium. The additional capital allows MaxCyte to fully execute its dual strategy of developing a pipeline of CARMA products, while also exploiting its leading position in the field of flow electroporation. The extra cash will allow MaxCyte to expand the number of CARMA programmes from two to five and fund a total of three clinical trials. Recently presented data at the AACR meeting confirms the potential of its CAR therapy. We increase our valuation by £40m to £178m, 351p per share.

Year-end: December	2015	2016	2017E	2018E
Sales ($m)	9.3	12.3	15.5	18.5
Adj. PBT ($m)	(1.4)	(3.3)	(11.1)	(13.6)
Net Income ($m)	(3.5)	(3.9)	(11.1)	(13.6)
Adj. EPS (c)	(186.4)	(10.0)	(22.4)	(26.7)
Cash ($m)	2.4	11.7	26.0	12.9
EBITDA ($m)	(0.7)	(2.6)	(10.4)	(12.8)

Source: Trinity Delta Note: Adjusted numbers exclude exceptionals.

- **Expansion of CARMA programme** The capital from the recent equity raise allows MaxCyte to complete Phase I/II trials with three different CARMA therapies, and take two other programmes to the IND stage. MaxCyte has no intention of conducting late stage trials, and will look to partner programmes once there is proof-of-concept clinical data. A Phase I/II trial in ovarian cancer with the lead programme CARMA-MO1 (anti-mesothelin) should start in 2017 and the first clinical data will probably be published in 2019.
- **Preclinical data at AACR confirm potential of CARMA** The first preclinical data from a CARMA programme was published at the annual AACR meeting. It confirmed that CARMA-MO1 (anti-mesothelin) has promising anti-tumour activity in an ovarian cancer model. There was a dose response, as would be expected with a therapy with transient activity, unlike the current CAR-T therapies in which T-cells are engrafted into the recipient.
- **Sustaining sales growth from flow electroporation systems** MaxCyte will also use the proceeds from the fund raise to invest in its core flow electroporation technology. The extra investment will help MaxCyte to stay ahead of the evolving demands from cell therapy developers. We forecast that it will enable the company to increase sales at a CAGR of over 20% over the next four years and by 26.1% in FY17.
- **Valuation increases by 34p to 351p/share** We raise our SOTP valuation of MaxCyte by £40m to £178m, or 351p per share. The increase reflects the £20m capital raise and a re-assessment of the CARMA platform, taking into account the expansion of the programme and the publication of the first preclinical CARMA data.

Price (Sterling)	245p
Market Cap	£129m
Enterprise Value	£100m
Shares in issue	50.8m
12 month range	78p-305p
Free float	70%
Primary exchange	AIM London
Other exchanges	NA
Sector	Healthcare
Company Code	MXCT.L MXCR.L
Corporate client	Yes



Company description:

MaxCyte uses its patented flow electroporation platform to transfect a wide array of cells. Revenues arise from sale and lease of equipment, disposables and licence fees; with an impressive client list. Additionally, a novel mRNA mediated CAR technology, known as CARMA, is being explored in various cancers, including solid tumours.

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Investment case

A clear leader in a fast growing market

MaxCyte is a leader in the field of flow electroporation, with its instruments used broadly by drug development companies, including nine of the top ten pharmaceutical companies. It markets three different systems (GT, STX and VLX instruments), which all use the same underlying flow electroporation technology, but target different segments of the market. These instruments are used to transfect cells: to assist drug discovery; manufacture products such as antibodies, vaccines and viral vectors; and develop cell therapies. Instrument sales also provided initial financing for the development of its proprietary CAR platform, CARMA. MaxCyte has now raised a total of £30m since its IPO in March 2016, which is being used to expand its CARMA programme and invest in sales and marketing of its flow electroporation systems.

Valuation

We increase our valuation of MaxCyte by £40m to £178m, equivalent to 351p per share

We raise our valuation of MaxCyte, using a sum-of-the-parts DCF methodology, from £138m to £178m, or 351p per share. The main reasons for the increase are the £20m capital raise and a re-evaluation of the CARMA platform following its expansion and the publication of preclinical data at the AACR meeting in April. MaxCyte's shares have increased by over 3x since its IPO, but the current share price is over 40% below our valuation. The next catalysts for the shares are expected to be its trading update and H117 interim results. There could also be news regarding progress with its CARMA programmes, new partnerships or data on the capabilities of its flow electroporation systems.

Financials

Well funded through multiple inflection points

MaxCyte raised £20m (gross) in March at 275p/share, a premium of 4.8% to the previous day's close, having had a gross cash position of $11.7m at the end of FY16 (net cash of $6.7m). The primary use of the capital raised will be to expand the number of CARMA programmes from two to five, including increasing the number of clinical trials from one to three. The proceeds will also be invested in R&D and sales & marketing activities in its core flow electroporation platform. We forecast that sales will increase by 26.1% in FY17 and at a CAGR of 20.3% over the next four years.

Sensitivities

Operating in a dynamic and competitive fields

MaxCyte's dual strategy with its fast growing flow electroporation business means that its risk profile is much lower than that of most biotech companies. But its prospects are still heavily linked to the results of the Phase I/II trial with its CARMA therapy, with initial results expected in 2019. The quality of the data from the Phase I/II studies, combined with advances with other competing CAR-T technologies, will determine the likelihood and size of any potential licensing deals for the CARMA technology.

MaxCyte: From strength to strength

MaxCyte made excellent progress on all fronts in FY16, with sales increasing by 32%, a new CARMA collaboration in haematological cancers, and the shares have quadrupled in value since the IPO. The recent £20m fund raising should enable MaxCyte to maintain the momentum. Within the next three years, the company expects to have three CARMA therapies in the clinic and a further two approaching the IND stage. Over the next four years, we expect sales to increase at a CAGR of 20.3%, as the company benefits from having the leading flow electroporation system available, and the extra investment in the technology. We raise our valuation by 29% to £178m (351p a share).

MaxCyte's dual strategy centres on its expertise in flow electroporation. It already sells its proprietary systems to over 50 companies, including nine of the top ten global players. The company is using the same device to produce its CARMA therapies, CAR (chimeric antigen receptor) treatment, which have a simpler and shorter production process than current CAR-T cell therapies.

Proprietary technology that can transfect almost any living cell with a wide variety of molecules and is highly scalable

The versatility of MaxCyte's flow electroporation systems means that they can transfect almost any living cell with a wide variety of molecules. The patented technology is both highly efficient, with 90% to 95% effective cell loading commonplace, and very scalable, up to $2x10^{11}$ cells can be processed in less than 30 minutes under sterile and clinical conditions. This has led to their use in a broad range of applications, from making cell lines for protein production and cell-based drug discovery tools to the manufacture of *ex-vivo* cell therapies, which has led to sales of $12.3m in FY16, an increase of 32% over 2015.

A key enabler for a growing number of cell therapies in development

Over the last 12 months, MaxCyte has increased the number of cell therapy programmes by about 10 to >40, and there are now >15 licensed for clinical development. The indications range from major diseases such as cancers to niche areas like β thalasemia. MaxCyte signed its first CRISPR-related licensing deal covering the commercial use of its systems in March 2017 with CRISPR Therapeutics/Casebia Therapeutics for haematological indications).

MaxCyte has also collaborated with the National Institutes of Health's (NIH) National Institute of Allergy and Infectious Diseases (NIAID) to develop a CRISPR-based gene-correction treatment for chronic granulomatous disease (CGD).The initial preclinical data was so promising that MaxCyte has signed a Collaborative R&D Agreement (CRADA) just with NIAID to conduct formal preclinical studies.

Three CARMA programmes to enter the clinic within the next three years

MaxCyte continues to make good progress with the CARMA platform, and CARMA-MO1 should be the first such product to enter the clinic with a Phase I/II trial in ovarian cancer in 2017. The recent fundraising will allow MaxCyte to conduct a Phase I/II study with CARMA-C12 (being developed in collaboration with the University of Washington in St Louis), bring another undisclosed programme into the clinic and advance two other projects to the IND stage. Data from these clinical trials could lead to them being partnered; MaxCyte has no plans to conduct late-stage clinical trials or market the therapies.

Leader in growing field of flow electroporation

MaxCyte is recognised as a key enabler of cell therapies

MaxCyte has strengthened its position as a leader in the field of flow electroporation, and shown that its systems can act as key enablers for many cell therapies over the last year. This was highlighted by commercial licensing deal with CRISPR Therapeutics/Casebia, which was driven by the licensee's desire to secure commercial access to what it views as "the leading *ex vivo* delivery solution for both clinical and commercial use".

The activity of many cell therapies in development depends on the modification of cells by introducing an agent (from a simple molecule to a complex protein) through the cell membrane by a process known as transfection[1]. Similarly, the utility of cells in drug discovery or in bio-manufacturing (eg. for vaccines, viral vectors or antibodies) often depends on the cells being transfected.

There are three main methods to transfect a cell:

- **Biochemical** - using reagents such as calcium phosphate, lipid-based reagents, DEAE-dextran, and dendrimers;
- **Physical** - electroporation, nucleofection, and other (including gene gun, sonoporation, magnetofection and optoinjection); and
- **Viral** - principally either lentiviruses or AAV (adeno-associated virus).

Viral transfection methods are still the most popular but electroporation is growing rapidly

Viral methods were among the earliest used and are widely employed in clinical research. Chemical methods are often used in academic research, where the low relative cost and flexibility are key factors that often overcome other limitations. Physical methods have come to the fore more recently, with electroporation[2] now the most widely used physical method. Whatever the application, the ideal method should have high transfection efficiency, low cell toxicity, minimal effects on normal cell physiology, be easy to use, and be reproducible.

MaxCyte is already the clear market leader in flow electroporation...

Over the past 18 years MaxCyte has established itself as the leading supplier of flow electroporation instruments to the pharmaceutical and biotechnology industries. Its flow electroporation devices can transfect almost any living cell with a wide variety of molecules, ranging from antibodies through DNA to mRNA and siRNA. The patented technology is both highly efficient, with 90% to 95% effective cell loading commonplace, and very scalable, up to $2x10^{11}$ cells can be processed in less than 30 minutes under sterile and clinical conditions.

... and its systems are widely used by biotech and pharma companies.

These are capabilities unmatched by competing electroporation devices, such as those produced by Lonza and Thermo Fisher Scientific, and has led to MaxCyte's

[1] Transfection refers to the modification of biological cells through the introduction or transfer of selected material, such as DNA or RNA, into the cell. The technological advances of the past decade have resulted in a seismic shift in cell-based research activities, leading to the developments seen in immune-based cancer treatments.
[2] Electroporation is the application of an electric field to cells to temporarily increase the permeability of the membrane, allowing the passage of larger molecules than would normally be allowed to enter the cell.

instruments being used broadly by drug development companies, including nine of the top ten global players.

Three key products address the main market segments...

MaxCyte's instrument range consists of three models: the **STX** addresses the core research market segment for cost-effective assay development, high throughput screening (HTS), high content screening (HCS), gram scale protein production, and other applications; the **VLX** offers similar versatility and ease of use but the capacity increases from $1x10^{10}$ cells per cycle to $2x10^{11}$ cells and is particularly suited to higher production needs (eg vaccines and viral vectors); the **GT** is of similar capacity to the STX but is cGMP compliant and targets the specific needs of those working on the pre-clinical, clinical development and potential commercial needs of cell-based therapies.

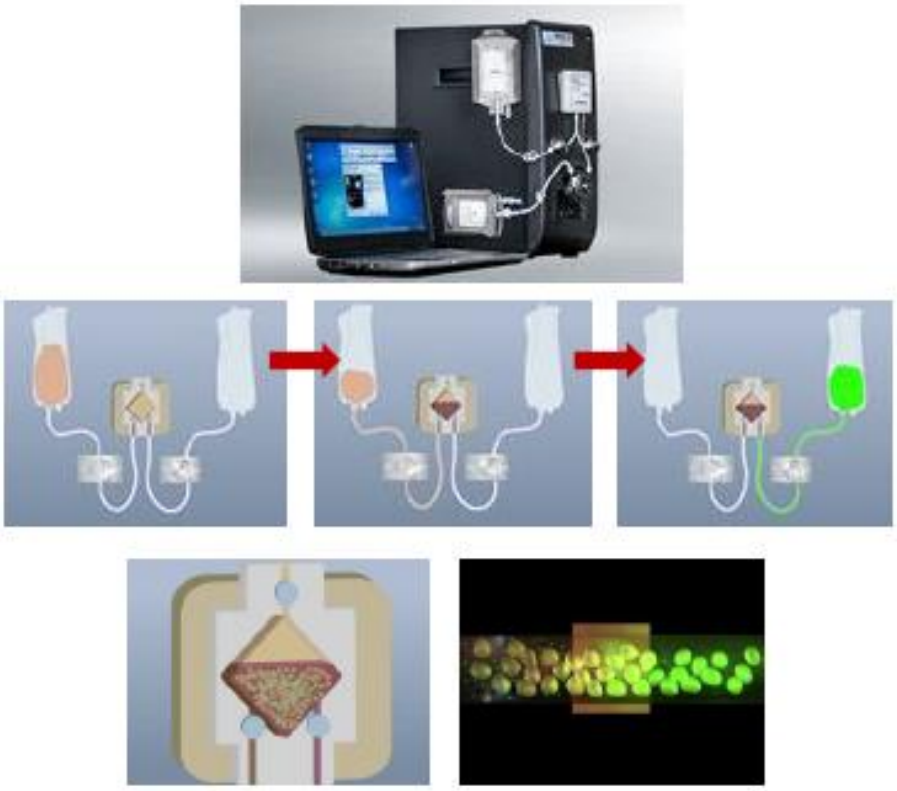
These market segments can be broadly classed as:

- Drug discovery and development;
- High volume bio-manufacturing; and
- Cell therapy development and commercialisation.

...providing a broad revenue base

The main revenues initially came from the discovery and development segments of both the academic sector and the drug industry but, as interest in the potential of cell-based therapies soared, the revenue base has broadened.

Exhibit 1: A diagram showing the instrument mode of action



Source: MaxCyte

Drug discovery and bio-manufacturing

STX model is highly versatile, easy to use, and generates reproducible results

The drug discovery applications are wide ranging, with the STX offering an ideal blend of flexibility and performance in a cost-effective package. For instance, cells can be transfected to produce a variety of assays (including ion channel, GPCRs, reporter genes, and siRNA based) that are comparable to stable cell lines in terms of quality and performance but in a fraction of the time and in physiologically-relevant cell. The STX can be used to rapidly manufacture for preclinical studies the gram scale volumes of difficult to produce proteins, such as multi-valent antibodies, which is usually all that is required for research purposes.

VLX model allows transfection of large volumes of cells for manufacturing

The VLX is sold specifically for its capability to transiently transfect extremely large volumes of cells (up to $2x10^{11}$ cells in around 30 minutes), which can result in significant savings (at least an order of magnitude) compared to other transfection methods. Despite this, it is still a compact unit and simple to operate. The VLX can be used to produce multi-gram quantities of proteins, antibodies, viral vectors and recombinant vaccines to cGMP standards.

Increased marketing, leading to an acceleration in sales growth

Both the STX and VLX, and their respective disposable processing assemblies, are sold primarily to biotechnology and pharmaceutical companies by a small sales team directly in North America and Europe and through distributors in other markets. Historically little resource was available to support the marketing effort but since the IPO the sales team has been expanded, acceleration of the company's sales growth. The selling cycle for the STX tends to be quite short (around 3-9 months from lead identification to sale), with the VLX being understandably longer.

Installed base and consumables sold per instrument growing

The average price of the STX was around $110,000 in 2016, and we estimate that each one generates on average more than $30,000 per annum in consumables sold per instrument. The installed base of STX and GT instruments is now more than 170 instruments. The VLX is priced at around $450,000 and, as yet, only a few have been sold. MaxCyte has a broad and robust sales base, with the top customer only accounting for 11% of revenues in 2016.

Partnered programmes in cell therapy

Consistency and versatility make MaxCyte's systems key enablers of cell therapies

A major attraction of flow electroporation for cell therapy developers is the ability to load cells consistently, even when using large loads (up to 500kDa), and still maintaining cell viability (c 95%). This is particularly the case in the field of CRISPR-Cas9-based therapies, which require the efficient and consistent transfection of both oligonucleotides and RNAs for CRISPR into specific cells in a reproducible manner.

CRISPR with MaxCyte's technology could be used to correct genetic defects

Data presented at the Keystone Symposia on Precision Genome Engineering and in a paper in Science Translational Medicine showed that the CRISPR technology together with MaxCyte's flow electroporation devices could be used to efficiently correct the CYBB gene that causes the X-linked chronic granulomatous disease (CGD), which causes immunodeficiency in circa 1 in 250,000 people.

These preclinical studies, which were carried out in collaboration with investigators at the National Institutes of Health's (NIH) National Institute of Allergy and Infectious Diseases (NIAID), indicated that the mutated CYBB gene in over 20% of CD34+ haematopoietic cells were converted *ex vivo* into the functional gene, so that when the cells were engrafted back into the preclinical models, there was a long-term clinically relevant improvement in the animals.

A new CRADA agreement will advance a gene-correction therapy towards clinical development

MaxCyte has just entered into a Cooperative Research and Development Agreement (CRADA) with the NIAID to advance the CGD programme further. NIAID will conduct the formal preclinical studies to assess the therapy's effectiveness and safety ahead of potential clinical trials, while MaxCyte will supply the RNA and ensure the flow electroporation process is robust and scaleable.

MaxCyte also presented preclinical data at the American Society of Gene and Cell Therapy Annual Meeting (ASGCT) on 12 May, showing that the gene responsible for sickle cell anaemia can be corrected using CRISPR technology delivered using its flow electroporation systems in circa 30% of haematopoietic stem cells (estimated that >20% correction required for a clinical effect). These two studies confirm that MaxCyte's systems can be used in gene correction as well as gene knock-outs. They also indicate that MaxCyte has a leading position in the field, as gene editing companies are generally focused on the lower technical challenge of developing therapies that knock out a faulty gene.

GT instruments designed for cell therapy needs...

The systems with which MaxCyte is targeting the growing cell therapy markets are the GT instruments. These are closed sterile system that are cGMP compliant, with, importantly, a Master File[3] lodged with the FDA. The Master File is a confidential dossier that effectively details, and validates, all the key parameters and processes employed. Unlike the STX and VLX instruments, the GT is leased to customers with an appropriate licence for use in narrowly defined fields. These are typically for non-exclusive and non-commercial use and describe the distinct cell types, the target indications, and the class of molecules employed.

... and there is a FDA Master File, simplifying the regulatory process for partners

The fees charged can vary widely; reflecting factors such as the nature of the customer (academic vs commercial), the breadth of the indications studied, and the stage of the programme (research vs clinical). The license allows a customer to reference the FDA Master File, hence simplifying and expediting their clinical planning.

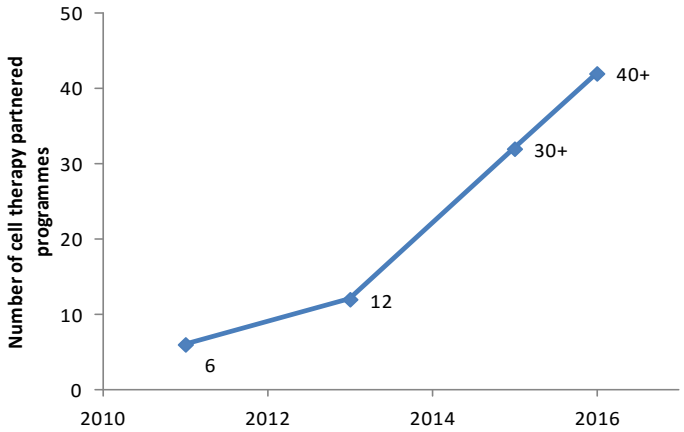
[3] An FDA Master File for biologic project is a confidential dossier that contains full information about the facilities, processes, or articles used in the manufacturing, processing, packaging, and storing of one or more human drug products. It is used to help prove the quality, safety and efficacy of a medicinal product ahead obtaining an Investigational New Drug Application (IND) and a Biologic License Application (BLA).

Leading academic institutions and biotech companies are using the GT

The number of cell therapy programmes using MaxCyte's system continues to increase rapidly, and there are currently over 40 such lease partnerships in place with a variety of pharmaceutical, biotechnology and academic institutions (Exhibit 2), including:

- Universities of Pennsylvania and Singapore;
- CRISPR companies, CRISPR Therapeutics and Editas;
- Other cell therapy companies, such as Medinet and Sangamo.

Exhibit 2: Number of partnered programmes in place



Source: MaxCyte, Trinity Delta

Number of partnered cell therapy programmes continues to rise rapidly...

Of these programmes, over 15 of them are currently licensed for clinical stages of development, and Medinet is commercially marketing in Japan a personalised dendritic cell treatment for oncology, which is manufactured using MaxCyte's GT instrument. Given the proven capabilities of MaxCyte's systems, and the growing number of engineered cell therapies being developed, we expect the company to sustain the rate of growth of partnered programmes.

Each lease is structured to the partner's needs but will normally follow the approach below:

- an initial research lease that allows sufficient support to explore a potential applications in a defined area; which
- if the programme shows sufficient promise to enter development then a clinical lease is required (which allows access to the Master File to support the IND); and,
- assuming a successful proof of concept (usually at Phase IIa), then a broader commercial lease will be negotiated.

...and MaxCyte has signed its first commercial license for a CRISPR-based therapy

MaxCyte signed an agreement covering the commercial use of its systems in March with CRISPR Therapeutics and Casebia (the JV between CRISPR Therapeutics and Bayer) for two CRISPR-based therapeutics for haemoglobin-related diseases and SCID (severe combined immunodeficiency) in March 2017. However, on this occasion its partners decided to secure commercial access to

its technology before the products even entered the clinic, because of the strength of MaxCyte's platform.

As indicated by the deal with CRISPR Therapeutics/Casebia, timings for the transitions clearly vary according to the programmes but, using industry averages, we would normally expect 6 to 18 months for a research lease and 2 to 5 years for a clinical lease, with a commercial lease being agreed during clinical development.

Deal terms are not disclosed but we, conservatively, estimate them to be worth $10m each

None of the terms of any of its deals have been disclosed. However, we estimate that fees for later programmes are around $250,000 pa, with further revenues also arising from the disposable processing assemblies (estimated at around $20,000 per instrument per year). As these programmes progress through clinical development, and approach commercialisation, the licensing deals are expected to broaden to include additional fees, including upfront license fees, milestone payments and/or royalties on eventual product sales. Although the amounts will likely reflect commercial factors (eg. indication market size, manufacturing complexity, treatment pricing, etc), we estimate that the deal values are circa $10m each.

Proprietary CARMA platform being developed

CARMA is a proprietary technology platform, with significant potential advantages over CAR-T therapies

MaxCyte has capitalised on its extensive transfection expertise by developing its proprietary CARMA platform. This is a novel mRNA mediated CAR technology that could provide fewer off-tumour effects and has a simpler, and less costly, production system than current CAR-T (Chimeric Antigen Receptor T-cell) approaches.

First CAR-T therapies are approaching the market

A number of CAR-T[4] therapies have shown remarkable efficacy in the clinic, although there are significant adverse events, including cytokine release syndrome and neurotoxicity. This has elicited widespread excitement among the medical and investment communities as their potential could herald a new era in cancer treatment; yet their current applicability beyond a relatively small subset of blood cancers remains a major frustration[5]. A variety of approaches

[4] CAR-T refers to techniques that genetically engineer a patient's own T-cells (also known as T-lymphocytes), a type of white blood cell that orchestrates the body's immune response, so it can produce specific proteins called Chimeric Antigen Receptors (CARs) that enable the T-cells to identify and help destroy cancerous cells. The T-cells are harvested and modified *ex-vivo* typically using lentivirus then returned to the patient. This model of delivery is very expensive and completely different from existing pharmaceutical approaches since it requires the creation of a highly personalised product for each patient and the lengthy manufacturing associated with lentivirus approaches.

[5] Whilst CAR-Ts have shown amazing efficacy in B-cell malignancies, their use in other cancers has been limited, in part, by antigen-specific toxicities and life-threatening CRS (cytokine release syndromes). Researchers globally are evaluating a variety of methods to overcome these, including novel antigen cocktails that only activate for a specific

have been tried in solid tumours but with limited success to date. This reflects the challenges that remain in target selection (a lack of truly unique tumour-associated antigens), accessibility (inefficient homing of T-cells into the tumour site), and finding avenues to overcome the active immune suppression that occurs within a tumour's microenvironment.

Exquisite activity, but extensive on-target/off-tumour side effects

The clinical success seen in B-cell haematological malignancies reflects the exquisite nature of the CD19 antigen. Most B-cell malignancies, as well as normal B cells, express the CD19 antigen but this is absent from other cell types, making it an attractive therapeutic target. Clearly accessibility and the tumour micro-environment are less of an issue in such blood cancers, but the long persistence of the effect also causes B-cell aplasia (the elimination of all of a patient's B-cells), which increases infection risks and requires costly long-term plasma infusions. The B-cell aplasia is a consequence of the effective targeting of the CD19 antigen and is known as an on-target/off-tumour side-effect or toxicity.

Despite extensive efforts, solid tumours have remained elusive

Although solid tumour antigens have the potential to be immunogenic, because tumours arise from the individual's own cells only mutated proteins or proteins with altered translational processing will be seen as foreign by the immune system. Antigens that are simply up-regulated or over-expressed (so called self-antigens) will not necessarily induce a functional immune response against the tumour.

CARMA offers promising activity...

The CARMA platform allows for the transient expression of the selected antigen complex, with the ability to control the timing and clinical effect with a degree of flexibility. This allows the treatment of the full range of haematological malignancies and solid tumours as the potentially limiting issue of on-target/off-tumour toxicities can be managed by varying the dosing (number of cells per dose and frequency of dosing) to deliver the optimal balance of targeted anti-tumour activity with tolerable toxicity.

... and overcomes a number of production issues

Another key issue affecting the wider adoption of CAR T-cell therapy will be how to roll it out at scale, with new production techniques and tailored supply chains required. Currently the system (both for autologous and allogeneic cells[6]) is complex, time consuming, and very costly (see Exhibit 3). The problems of industrialising the processes are many; producing material at a commercially viable scale is complex and few systems reliably and consistently provide adequate yield, scalability and potency.

Commercial manufacture is currently a major bottleneck

The existing manufacturing process takes between 7 and 15 days and is estimated to be priced at $200K-$450K per patient. Substantial efforts are being made to automate as many of the procedures as possible in order to reduce

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tumour site, introducing "suicide switches", co-administration with other agents (eg IL-6R blockers), and tailoring the T-cells' CAR expression to suit the particular tumour type.

[6] Autologous cells are taken from the patient, modified and then re-introduced. Allogeneic cells are taken from a donor, modified and then infused into the patient.

variability, increase reproducibility and lower costs. Nonetheless, the challenges to successfully producing commercial grade material for use in a variety of clinical settings are manifold and remain daunting.

Exhibit 3: The typical steps in producing an autologous CAR-T therapy

The raw material is blood cells, which are transformed in a 5-step process:

- **Step 1: Apheresis** consists of extracting the T-cells from among the Peripheral Blood Mononuclear Cells (PBMC) of the blood and isolating with a cGMP compliant process. Then transportation to the cell processing site.
- **Step 2: Selection and activation of T-cells** through stimulation of TCR (T-Cell Receptor) and Co-stimulation receptor (eg CD3 and CD28) to transform them into a Cytotoxic T-Cell (CD8+).
- **Step 3: Transfection.** Once a T-cell is activated, the CAR needs to be expressed by the cell to recognize the tumours. This requires the insertion of a gene or other component via a vector. Currently, the main method of transfection uses lentivirus technology, but other methods are being used, including mRNA transfection using MaxCytes instruments. In the case of allogeneic cells, the immunogenicity is reduced at this step (eg through TCR knock-out).
- **Step 4: T-Cell expansion.** Needs to strike the right time balance for proliferating the culture. The period has to be long enough for good CAR insertion, but not too long as over time cells begin to lose their function.
- **Step 5: Conservation** and **administration.** Cells are purified, processed and cryo-preserved before being transported back for infusion into the patient.

Source: Trinity Delta and MaxCyte; Note: The CARMA approach significantly simplifies the process as indicated in Exhibit 5.

MaxCyte originally got involved in the CAR-T field through two notable collaborations with world leaders in the CAR field. These are with Dr Carl June of the University of Pennsylvania and Dr Dario Campana originally of St. Jude's Children's Research Hospital and now with the National University of Singapore. The goal of these alliances was to develop a non-viral, commercial, and safer approach to produce CAR-T therapies capable of addressing more tumour types.

Preclinical and early clinical trials confirm potential of mRNA CAR-T approach

To date over 30 patients have been treated in seven clinical trials (five at University of Pennsylvania and two at National University of Singapore [NUS]) using mRNA and MaxCyte's technology to engineer expanded T-cells to express CAR, and have confirmed the potential of the approach. In a small clinical trial with 14 patients conducted by the University of Pennsylvania with anti-mesothelin CAR-T therapy in mesothelioma and pancreatic, the treatment was well tolerated without dose-limiting toxicity and one patient achieved a partial response and six patients experienced stable disease (Source: J. Clin. Oncol. 33, 2015). Other antigen targets using the mRNA CAR-T approach enabled by MaxCyte's technology that have been studied include GD-2, and C-met in solid tumours and CD-19 and CD123 in haematological cancers.

Early studies support view that further trials are warranted

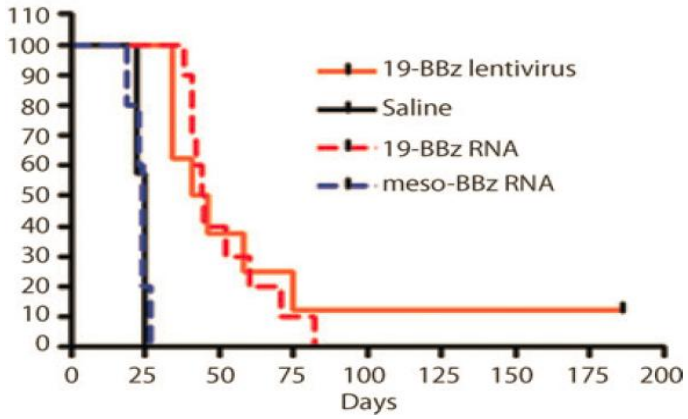
The initial results from these admittedly early trials also suggest that both on-target/off-tumour toxicities and CRS (cytokine release syndromes) can be contained. However, Janos Tanyi from the University of Pennsylvania has said

that his group at the University would be concentrating its efforts on the lentiviral approach as "the antitumor effect was very limited" with the mRNA CAR-T cell only detectable for one to two days with a dose of 10^8 cells. MaxCyte disagrees with this view, and cites the findings of Carl June's group who found that they detected mRNA CAR-T cells up to seven days after administration with 10^9 cells. There is also preclinical data suggesting that mRNA CAR-T cells can be as potent as lentiviral CAR-T cells (Exhibit 4).

Preclinical results suggest simplified process is as effective

When MaxCyte was studying mRNA CAR using expanded T-cells, it discovered that it could significantly simplify the process by transfecting freshly isolated PBMCs (Peripheral Blood Mononuclear Cells) while producing cells with the same level of anti-tumour activity. Consequently, MaxCyte decided to invest the profits from the sale of the flow electroporation instruments into its proprietary CARMA platform. This led to MaxCyte forming a collaboration with the Johns Hopkins Medical Institute's Kimmel Cancer Center to develop the first CARMA therapy against cells expressing the mesothelin protein.

Exhibit 4: Anti-CD19 mRNA CAR-T have similar activity to anti-CD19 lentiviral CAR-T therapy in mice



Source: Barrett DM et al, Human Gene Therapy, 22, 1575-86, December 2011

CARMA could reduce process time from 1-2 weeks to a single day

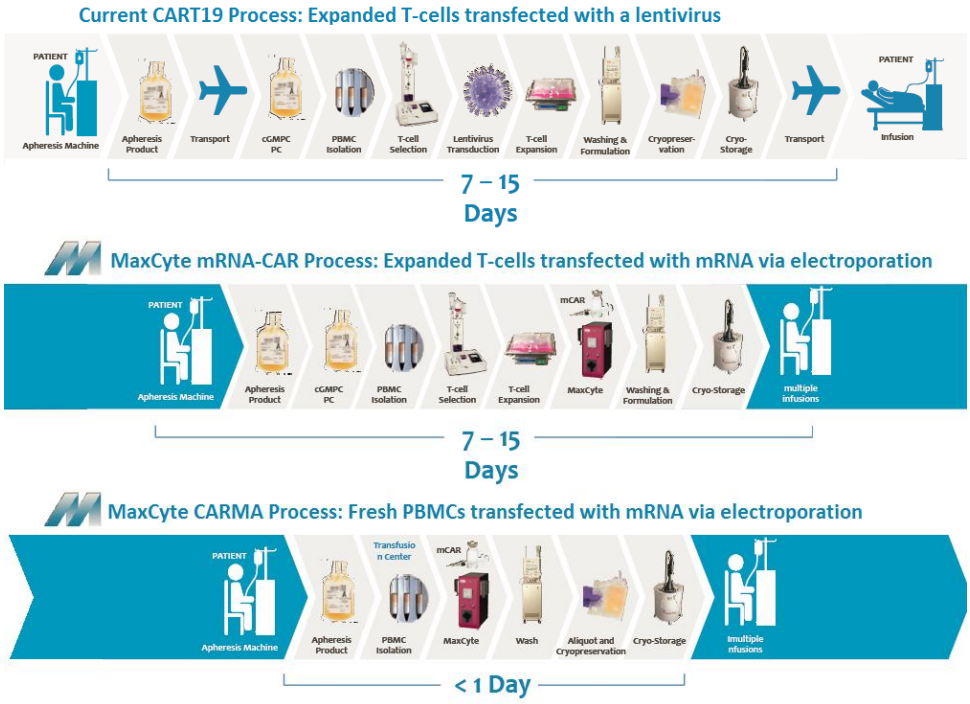
The CARMA platform can potentially offer a number of supply chain benefits over the lentiviral vector systems and mRNA CAR. The current process using lentivirus transfection is complex and time-consuming, requiring the cells collected during apheresis to be transported to a central facility (Exhibit 5). The mRNA-CAR process used by the University of Pennsylvania and NUS with MaxCyte's flow electroporation is much simpler and can be completely conducted in a hospital; however, it still requires the expansion of the T-cells and hence still takes one-to-two weeks.

In comparison, MaxCyte's CARMA process is even simpler, with the PBMCs transfected rather than T-cells, thus avoiding the time-consuming expansion step. This means that the CARMA process can be carried out in a single day. This would suggest that the patient could be treated with a protocol that requires only an initial overnight stay.

First preclinical CARMA data supports potential, and shows the importance of dosing

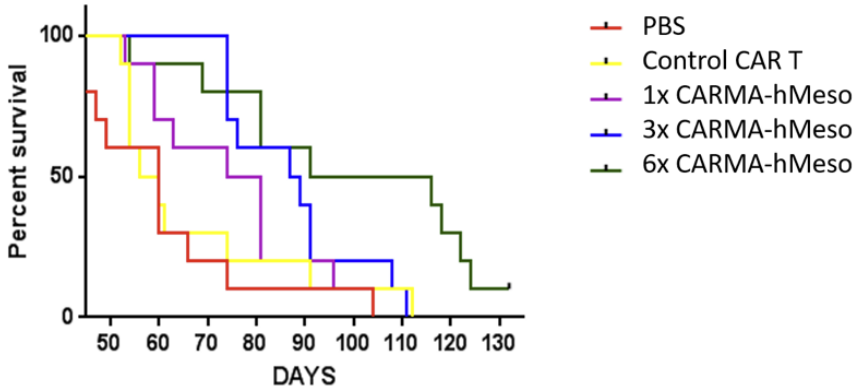
The first preclinical data from this programme was presented in a poster at the AACR meeting in April. It showed that there was a dose response, with a greater survival benefit compared to placebo in animals dosed with $1x10^8$ cells (intra peritoneal) than with $1x10^7$ cells ($p<0.001$ vs $p=0.0044$). Similarly, there was a larger benefit associated with multiple dosing of CARMA-hMeso cells (Exhibit 6, CARMA-hMeso is also known as CARMA-MO1).

Exhibit 5: A comparison lentiviral CAR-T, mRNA CAR and CARMA processes



Source: MaxCyte

Exhibit 6: Survival benefit of multiple doses of CARMA-hMeso cells in mice



Source: Hung C. et al, AACR Annual meeting 2017; Note: each dose of CARMA-hMeso contained $5x10^7$ cells

CARMA cells effectively act as antibodies conjugated to cytotoxic T-cells

These results with the dose response highlight a key difference between CARMA therapy and the current CAR-T treatments nearing approval, and support the view that on-target/off-tumour effects should be manageable. CARMA cells only survive transiently, whereas CAR-T cells become engrafted in the recipient so there is not a clear dose response. Therefore, the CARMA therapy in many ways

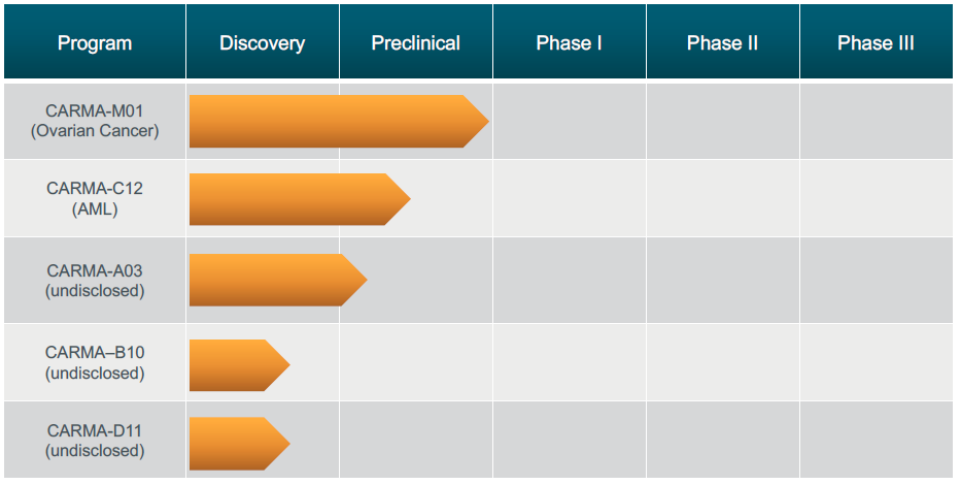
has greater similarity to an armed antibody (CARMA cells are effectively antibodies conjugated to cytotoxic T-cells) than a CAR-T therapy.

This has consequences for the design of clinical trials and potential clinical use. We believe that clinical development will start with a traditional dose-escalation design to identify the best dose, which takes into account efficacy, safety and commercial considerations (eg. the number of doses produced from a single apheresis). We also do not expect a preconditioning treatment (eg. cyclophosphamide or fludarabine) to be used; there are significant toxicities associated with their use, but they are required with CAR-T therapies to enable the CAR-T cells to engraft.

First development programme should enter the clinic this year

MaxCyte's CARMA pipeline is shown in Exhibit 7, which shows that both solid and haematological tumours are being targeted. Its lead programme is CARMA-MO1 (anti-mesothelin, CARMA-hMeso) is due to enter clinical development in 2017 with a Phase I/IIa trial in ovarian cancer with c 18 patients. Initial clinical data could be available in 2019.

Exhibit 7: MaxCyte's CARMA pipeline



Source: MaxCyte

A number of development programmes underway...

Preclinical development of the second programme, CARMA-C12, began in December 2016 with the formation of a collaboration with John DiPersio MD PhD and his team at the University of Washington in St Louis. CARMA-C12 targets cells expressing the CD123 protein to treat acute myeloid leukaemia (AML). CD123 is an attractive target as it is highly expressed on AML cells; however, there are also low levels of expression on haematopoietic stem cells, meaning that there is the risk of on-target/off-tumour effects, which, unlike in first-generation CAR-T therapies, can be managed with the CARMA technology. This programme should enter the clinic in Q418/Q119.

No details about the other products has been disclosed, although MaxCyte has said that the recent capital raise will allow it to initiate Phase I/II studies with its leading three programmes and advance two others to the IND stage.

... that could lead to major licensing deals

MaxCyte has not altered its strategy following its £20m capital raise, and still does not intend to become a drug development company and conduct more advanced clinical trials with CARMA. Instead, it plans to use the data from the Phase I/II studies, assuming the data are positive and confirm the potential of CARMA, to find a partner(s) to advance the different programmes. Ideally, the strength of the data from the first indications will be such that it drives demand for the preclinical products without the need for clinical data.

The possible value of a deal for one CARMA programme is difficult to estimate, but the interest being shown in the area of CAR-T and other cellular therapies means that >$150m in milestones and royalties per programme/target appears realistic (Medigene formed a collaboration at the preclinical stage with Bluebird Bio covering four TCR programmes, from which it could earn milestones of over $1bn). Timings for these are understandably uncertain, but the most likely timing for the first deal would be in 2020.

Well protected in a sizeable and growing market

MaxCyte is the dominant flow electroporation company

MaxCyte's instruments address a well defined need in a large market segment. The Markets and Markets report (June 2015) on Transfection Reagents and Equipment estimates this to be worth $676.8m in 2015 and expects it to grow by 7.2% CAGR to $957.9m in 2020.

Exhibit 8: Competitors in the transfection market

Transfection technology	Companies	Devices/Products	Notes
Flow electroporation	MaxCyte	STX, VLX, GT	10^5-10^8 cells per minute, up to $2x10^{11}$ cells per run
	Lonza	4D-NucleoFector LV	10^7-10^9 cells
Static electroporation	BioRad	Gene Pulse, MicroPulser	10^5-10^7 cells per reaction
	BTX (Division of Harvard Apparatus)	ECM, Gemini, AgilePulse	10^4-10^8 cells per reaction
	Lonza	NucleoFector	10^4-10^7 cells per reaction
	Thermo Fisher Scientific	Neon	10^4-10^6 cells per reaction
Viral transfection	Lentigen	Lentivirus	GMP facility
	Oxford Biomedica	Lentivirus	GMP facility
	Takara Clontech, BioRad	Various	Kits for viral transfection
Biochemical transfection	Promega, Thermo Fisher Scientific, BioRad	Various methods including lipids, calcium phosphate, cationic polymers and DEAE-dextrin	Products are relatively cheap and used mainly by academic scientists
Biolistic particle delivery	BioRad	Helios Gene Gun	Simple, versatile technique, but with low efficiency

Source: Companies

By usage North America is the largest market, closely followed by Europe, and then Asia-Pacific and rest of the world (RoW). Asia-Pacific (mainly due to China) is expected to grow at the highest CAGR during the forecast period. Whilst the biochemical methods are currently the largest (both volume and value), these

are set to be overtaken by viral (mainly lentiviral and AAV) and physical (principally electroporation) methods as use switches from biomedical research to therapeutic delivery (Exhibit 8).

Well protected by patents, know how, and trade secrets

To protect its commercial position, MaxCyte has patents covering the technology platform, the individual critical components and certain applications; additionally it possesses substantial know-how and trade secrets relating to the development and commercialization of cell-therapy products. As one of the pioneers in the field, MaxCyte has a broad patent estate, with a multi-layered portfolio covered by 38 issued or pending patents in key jurisdictions.

The presence of the FDA Master File for MaxCyte's instruments provides the company with an additional competitive advantage as regulatory filings are simplified and will help to secure MaxCyte's position as a preferred partner for companies developing cell therapies. The FDA Master File includes information not disclosed in patents, but this is a confidential document, which MaxCyte's clients only need to reference when making regulatory applications, without having precise knowledge of the contents of the File.

Competitive landscape is set to toughen but little threat to our forecast sales growth

Unsurprisingly, MaxCyte is starting to face more competition given the attractive market dynamics, and Lonza has recently launched a closed-system flow electroporation system. However, we do not believe that Lonza will significantly affect MaxCyte's growth for the foreseeable future despite its greater marketing power; MaxCyte has significant first mover advantage having launched its first product in 2000, and its range of systems means that the scale up process is seamless, whereas a cell therapy developer would have to switch from static electroporation to flow electroporation with Lonza's NecleoFector products. Also, Lonza's system is not yet validated for cGMP/clinical use.

Sensitivities

Limited exposure to clinical trial risks

Although MaxCyte is exposed to many of the risks associated with investing in small- to mid-cap biotech companies, its risk profile is considerably lower than most such companies. This is because it has a fast-growing revenue stream and, due to the number of alliances it has, it generally has limited exposure to the clinical readout from any one programme. That said, the quality of the clinical data from the ongoing and planned clinical trials with CARMA will be crucial in determining the likelihood and value of any potential licensing deals for CARMA.

CAR-T space is very competitive and dynamic and CARMA may struggle

The potential interest in CARMA from possible partners will also depend on advances from other companies developing CAR-T therapies; this area of science is very competitive. For instance, Bellicum Pharmaceuticals is developing CAR-T products with its CIDeCAR technology so that it can eliminate the infused CAR-T cells if desired. Groups at University of Pennsylvania and University of Texas MD Anderson Cancer Center are addressing the issue of on-target/off-tumour toxicities by developing low affinity CAR-T therapies. Ziopharma/Intrexon licensed Sleeping Beauty technology from MD Anderson, which allows the formation of viral-free CAR-T cells.

Major companies focused on eroding MaxCyte's position in electroporation

The drug discovery and cell therapy revenue lines are growing strongly because of the leading position MaxCyte enjoys in the field of flow electroporation. There are significant barriers to competitors, given its patent portfolio and trade secrets; however well-resourced companies such as BTX, Lonza and Thermo Fisher Scientific will be striving to break MaxCyte's dominance.

Valuation

MaxCyte is well positioned to benefit as CAR-T therapies evolve and mature

MaxCyte is well positioned to benefit from the growing interest in altering cells to treat currently intractable diseases. The appeal of successful therapies should not be underestimated, both from a clinical and commercial perspective, with MaxCyte's technology having the potential to be the key enabler within a number of such treatments, not just CARMA-based therapies, as highlighted by CRISPR Therapeutics/Casebia's decision to secure access to MaxCyte's systems for commercial use before starting clinical development.

We have raised our valuation of MaxCyte from £138m to £178m using a DCF and sum-of-the-parts methodology, as summarised in Exhibit 9, reflecting the impact of the £20m capital raise, extra investment in sales and marketing, and the expansion of the CARMA programme. This has led to our valuation per share to increase by 34p to 351p, after taking into account the dilution from the fund raising.

Exhibit 9: Summary of the DCF valuation model of MaxCyte

Cashflow	Notes	NPV ($m)	NPV (£m)	NPV/share (p)
Drug discovery & manufacturing	Three phase DCF – Sales growing at CAGR of 20.5% from $5.5m in FY15E to $14.1m in FY20E, before trending to 2% growth. Pre-G&A margin[1] growing from 30% to 45% in FY30E. Terminal growth rate is 2%.	66.3	51.0	100.3
Cell therapy	Three phase DCF – Sales growing at CAGR of 25.4% from $3.8m in FY15E to $11.6m in FY20E, before trending to 2% growth. Pre-G&A margin[1] growing from 5% to 55% in FY30E. Terminal growth rate is 2%.	83.7	64.4	126.7
Commercial license deals	Five deals each with an NPV of $10m; one in 2017, another in 2018, two in 2019 and one more in 2020.	33.0	25.4	50.0
CARMA technology	Based on five product deals worth $150m each in upfront/development milestones received between 2020 and 2026, likelihood of receipt: 70% to 10%.	83.2	64.0	126.0
G&A, CAPEX, dep & amort, changes in WCR	Three phase DCF – G&A increasing by 9.0% from $4.1m (33% of sales) in FY16 to $6.2m in FY20E trending to 18% of sales in FY30E	(62.9)	(48.3)	(95.1)
Net cash	At H117E	28.5	21.9	43.2
Total		**231.8**	**178.3**	**350.9**

Discount rate	10% for Drug discovery & manufacturing and Cell therapy businesses; 12.5% for CARMA project
Tax rate	30% from 2021
Exchange rate	$1.30/£1

Source: Trinity Delta; Note [1]For the purposes of the valuation, we have assumed that 50% of R&D excluding CARMA and sales & marketing expenses are allocated to Drug discovery and the remaining 50% to Cell therapy.

The two main changes to our valuation relate to the company's cash position and the CARMA programme. We estimate that MaxCyte will have a net cash position of $28.7m at H117 compared to $6.7m at FY16. We have also increased the estimated value of upfront/development milestones from the partnering of CARMA programmes from $75m to $150m/product, after taking into account other cell therapy deals in oncology and the data presented at AACR. At the same time, we adjusted the assumed timings of the potential upfront payments or milestones from between 2020 and 2026 to between 2019 and 2024.

We continue to model using conservative assumptions

We still adopt conservative assumptions in our modelling; for instance, we have not included any potential royalty revenues or sales milestones from the CARMA platform. We feel this is currently appropriate but as progress is achieved, we would expect to revisit the model and anticipate the valuation would reflect this.

The lock-in arrangement, affecting 68.5% of the outstanding shares and options, lapsed on the first anniversary of the admission of the shares to AIM on 29 March 2017, which should lead to an improvement in the liquidity of MaxCyte's shares.

Financials

The strong sales growth seen to date is forecast to accelerate...

MaxCyte succeeded in raising £20m (gross) on 31 March 2017 at 275p per share, a 4.8% premium to the previous day's closing price. This leaves the company well position to execute its dual strategy. Some of the proceeds from the capital raise will be invested in increased marketing and R&D in its flow electroporation technology; however the majority will be invested in the CARMA platform, expanding the number of programmes from two to five and covering the costs of two additional clinical trials (first clinical trial with CARMA-MO1 is funded by proceeds from the IPO).

...as use of MaxCyte's products broadens, both scientifically and geographically

With the support of the extra capital, we continue to expect MaxCyte to deliver strong revenue growth for the foreseeable future, as it exploits its leading position in the field of flow electroporation. Over the last four years, sales have grown at a CAGR of 24.8%, with a step up in growth to 32.1% in FY16 so that total revenues were $12.3m. This has been achieved while also gradually improving the gross margin to 89.3% last year. We forecast that MaxCyte will grow sales at a CAGR of 20.3% over the next four years, with 26.1% sales growth in FY17.

Continuing investment in R&D and sales and marketing

MaxCyte is preparing for sustained longer-term growth by increasing its investment in R&D (excluding CARMA) and sales & marketing. We estimate that these expenses will increase by 49% and 14% respectively in FY17. It should be noted that this R&D expense includes costs associated with field scientists, who are also involved with marketing MaxCyte's systems.

There will also be a large increase in R&D spending in FY17 on the CARMA platform as MaxCyte expands the number of programmes to five and advances its lead product into the clinic. We estimate that spending on CARMA will

increase from $1.3m in FY16 to $7.6m in FY17 at the moment, but will have greater clarity on the level of investment on CARMA once MaxCyte has submitted its IND and agreed on a clinical trial design for the Phase I/II study with CARMA-MO1 in ovarian cancer.

The changes to our estimates, following the £20m capital raise, are detailed in Exhibit 10. Our forecasts do not include potential licensing agreements covering the commercial use of MaxCyte's devices, such deals could result in upfront payments of circa $1m, with milestones and eventual royalties.

Exhibit 10: Summary of changes to estimates

	Sales ($m)			EBITDA ($m)			Adj. EPS (c)		
	Old	New	Change	Old	New	Change	Old	New	Change
FY17	15.3	15.5	4.1%	(6.0)	(10.5)	N/A	(14.8)	(22.4)	N/A
FY18	18.3	18.5	2.2%	(3.8)	(13.0)	N/A	(9.9)	(26.7)	N/A

Source: Trinity Delta

Exhibit 11: Summary of financials

Year-end: December 31 $m	2014	2015	2016	2017E	2018E
INCOME STATEMENT					
Revenues	**7.2**	**9.3**	**12.3**	**15.5**	**18.5**
Cost of goods sold	(1.0)	(1.0)	(1.3)	(1.9)	(2.2)
Gross Profit	**6.2**	**8.3**	**11.0**	**13.6**	**16.3**
R&D expenses (excluding CARMA)	(2.5)	(2.7)	(3.4)	(5.1)	(6.2)
R&D expenses (CARMA)	0.0	(0.3)	(1.3)	(8.7)	(11.4)
Sales and marketing expenses	(2.5)	(3.3)	(4.8)	(5.5)	(6.3)
General and administrative expenses	(2.5)	(2.7)	(4.2)	(4.9)	(5.4)
Underlying operating profit	**(1.3)**	**(0.8)**	**(2.7)**	**(10.5)**	**(13.0)**
Underlying operating profit (excluding CARMA)	**(1.3)**	**(0.5)**	**(1.4)**	**(1.9)**	**(1.6)**
Other revenue/expenses	0.0	0.0	0.0	0.0	0.0
EBITDA	**(1.2)**	**(0.7)**	**(2.6)**	**(10.4)**	**(12.8)**
Operating Profit	**(1.3)**	**(0.8)**	**(2.7)**	**(10.5)**	**(13.0)**
Interest expense	(0.6)	(0.7)	(0.6)	(0.6)	(0.6)
Profit Before Taxes	**(1.8)**	**(1.4)**	**(3.3)**	**(11.1)**	**(13.6)**
Adj. PBT	**(1.8)**	**(1.4)**	**(3.3)**	**(11.1)**	**(13.6)**
Current tax income	0.0	0.0	0.0	0.0	0.0
Cumulative preferred stock dividend	(1.9)	(2.1)	(0.5)	0.0	0.0
Net Income	**(3.8)**	**(3.5)**	**(3.9)**	**(11.1)**	**(13.6)**
EPS (c)	**(1,518.2)**	**(186.4)**	**(11.5)**	**(22.4)**	**(26.7)**
Adj. EPS (c)	**(1,518.2)**	**(186.4)**	**(10.0)**	**(22.4)**	**(26.7)**
DPS (c)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Average no. of shares (m)	0.2	1.9	33.5	49.5	50.8
Gross margin	*87%*	*89%*	*89%*	*88%*	*88%*
BALANCE SHEET					
Current assets	**5.9**	**6.2**	**15.8**	**31.0**	**18.8**
Cash and cash equivalents	3.4	2.4	11.7	26.0	12.9
Accounts receivable	1.4	1.5	2.4	2.7	3.3
Inventories	0.9	1.1	1.3	1.9	2.3
Other current assets	0.2	1.2	0.3	0.3	0.3
Non-current assets	**0.2**	**0.2**	**0.3**	**0.5**	**0.6**
Property, plant & equipment	0.2	0.2	0.3	0.5	0.6
Other non-current assets	0.0	0.0	0.0	0.0	0.0
Current liabilities	**(4.2)**	**(5.1)**	**(5.7)**	**(7.6)**	**(9.0)**
Short-term debt	(1.5)	(0.8)	(0.0)	(0.0)	(0.0)
Accounts payable	(1.4)	(2.3)	(3.2)	(4.5)	(5.4)
Other current liabilities	(1.4)	(2.0)	(2.5)	(3.1)	(3.6)
Non-current liabilities	**(3.6)**	**(4.4)**	**(5.3)**	**(5.3)**	**(5.3)**
Long-term debt	(3.4)	(4.2)	(5.0)	(5.0)	(5.0)
Other non-current liabilities	(0.2)	(0.2)	(0.3)	(0.3)	(0.3)
Equity	**(1.6)**	**(3.1)**	**5.1**	**18.5**	**5.1**
Share capital incl additional paid-in and treasury shares	43.8	45.3	56.8	81.1	81.1
Other	(45.4)	(48.4)	(51.7)	(62.7)	(76.1)
CASH FLOW STATEMENTS					
Operating cash flow	**(1.9)**	**(0.2)**	**(2.3)**	**(9.7)**	**(12.7)**
Profit before tax	(1.8)	(1.4)	(3.3)	(11.1)	(13.6)
Non-cash adjustments	0.3	0.2	0.3	0.9	0.9
Change in working capital	(0.4)	1.1	0.7	1.1	0.5
Interest paid	0.0	0.0	0.0	(0.6)	(0.6)
Taxes paid	0.0	0.0	0.0	0.0	0.0
Investing cash flow	**(0.1)**	**(0.1)**	**(0.2)**	**(0.3)**	**(0.4)**
CAPEX on tangible assets	(0.1)	(0.1)	(0.2)	(0.3)	(0.4)
Other investing cash flows	0.0	0.0	0.0	0.0	0.0
Financing cash flow	**4.7**	**(0.7)**	**11.9**	**24.3**	**0.0**
Proceeds from equity	1.7	0.0	11.9	24.3	0.0
Increase in loans	3.0	(0.1)	(0.1)	0.0	0.0
Other financing cash flow	0.0	(0.7)	0.0	0.0	0.0
Net increase in cash	**2.6**	**(1.0)**	**9.3**	**14.3**	**(13.1)**
Cash at start of year	0.8	3.4	2.4	11.7	26.0
Cash at end of year	**3.4**	**2.4**	**11.7**	**26.0**	**12.9**
Net cash at end of year	**(1.5)**	**(2.6)**	**6.7**	**21.0**	**7.9**

Source: MaxCyte, Trinity Delta Note: Adjusted numbers exclude exceptionals.

Company information

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Key personnel

Person	Position	Biography
Dr Stark Thompson	Non-Executive Chairman	Former President & CEO of Life Technologies Inc (now Thermo Fisher). Also formerly Director of Luminex (Nasdaq LMNX), Chairman of GeneLogic (Nasdaq GLGC), and active with several educational and non-profit organisations. Holds a Bachelor degree in Chemistry from Muskingum College and a PhD in Physiological Chemistry from Ohio State University.
Douglas A Doerfler	President and CEO	Founded MaxCyte in July 1998. Previously President, CEO and a Director of Immunicon Corporation, a private cell-based therapy and diagnostics company. Prior to this, had a number of executive positions with Life Technologies Inc. Holds a Bachelor degree in Finance from the University of Baltimore School of Business and a Certificate in Industrial Relations.
Ronald Holtz	CFO	CFO since 2005. Previously CFO at B2eMarkets, a private software company, and RWD Technologies Inc, a public information technology and consulting firm. Prior to this experience with Ernst & Young. Has a Bachelor's degree in mathematics from the University of Wisconsin, an MBA from the University of Maryland and is a CPA.
Dr Madhusudan Peshwa	CSO and EVP Cellular Therapies	Previously EVO for R&D at New Neural LLC, a start up stem cell therapy company. Prior to this VP of Manufacturing and VP of Process Sciences at Dendreon Corporation (Nasdaq DNDN). Holds a B.Tech from the Indian Institute of Technology, Kanpur, India and a Ph.D from the University of Minnesota.

Top 10 institutional shareholdings

	No. of shares (m)	% holding
Intersouth Partners VI	8.24	16.21
River and Mercantile Asset Management	5.78	11.37
Bost-Jackson	4.65	9.15
Legal & General Investment Management	3.95	7.99
Harbert Venture Partners	3.69	7.26
Unicorn AIM VCT	2.74	5.40
Blackrock Investment Management (UK)	2.14	4.22
MASA Life Science Ventures	1.85	3.64

Source: MaxCyte

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Disclaimer

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