

Target Price Change

**Primer design acquisition transforms prospects**

*Novacyt has announced sales of €5.0m for 1H16, demonstrating strong growth (+36%) in the NovaPrep business and the addition of two months' revenue from the recently acquired Primer Design business. Lab21 revenues were down 19% YoY as a result of lower tenders in the emerging markets but should pick up in 2H16 through new product launches and a tender pipeline of around €1m. We have revised our forecasts based on the current roll-out of NovaPrep and the acquisition of Primer Design (completed in May 2016), and set a revised target price of €2.69 (previously €6.50). We believe the continuing growth of NovaPrep, the immediate addition of revenues from Primer Design and the potential synergies between Primer Design and the Lab21 business are likely to accelerate growth, and believe the current share price discounts this potential. Buy.*

**Growth bolstered by NovaPrep and Primer Design.** Novacyt has announced sales of €5.0m for 1H16 (+11% at cc), driven by encouraging growth (+36 YoY% to €0.85m) from its NovaPrep platform, with growth of 57% and 101% in International markets and Asia Pacific, respectively. In the UK, Novacyt recorded revenue of €0.98m from two months' revenue from recently acquired Primer Design (May 2016), but Lab21 sales were down 19% YoY at cc (to €3.14m) due to ongoing tender delays in emerging markets and a tough comparator period. Tenders to the value of €1m remain in the pipeline but the timing of these being received is uncertain. Cash at the end of June 2016 was €1.8m.

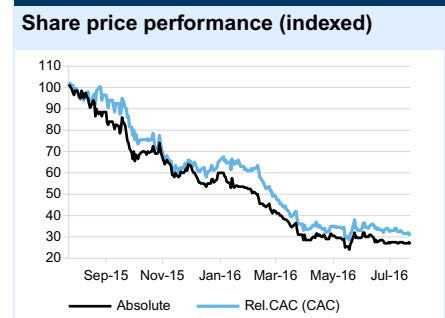
**Primer Design acquisition completed through successful fundraising during the period.** Primer Design is a UK-based molecular diagnostic company that specialises in developing and manufacturing real-time PCR kits and reagents, including a proprietary platform and instrument branded 'genesig' (details overleaf). Crucially, Primer Design is expected to significantly enhance sales and profitability in 2H16, having already contributed 20% to group revenue in 1H16 after only two months of integration. It has delivered a CAGR of 32% since its inception in 2005, with revenue of €5.3m and EBITDA of €1.8m in 2015. Primer Design adds a new cutting edge molecular technology to the Lab21 portfolio, distribution network and R&D pipeline, which should allow the combined group an enhanced offering and the potential to grow sales beyond our current forecasts.

**Forecasts revised.** With this note we have published revised forecasts for the group in light of the rapidly growing, high margin Primer Design business and slower roll-out of NovaPrep than originally forecast. Based on our forecasts, the company should reach breakeven in 2017 and profitability thereafter, primarily through the addition of the high margin (c.80%) Primer Design business. We now forecast group revenue of €13.3m for FY16 (vs. €16.7m previously), with gross margins of 58% and net loss of €2.1m.

**Reiterating Buy recommendation with revised TP of €2.63.** The acquisition of Primer Design deal has transformed Novacyt's prospects, with the potential to be breakeven at the end of 2017 and profitable thereafter. Novacyt is now evaluating strategic options to leverage the strength of the combined businesses internationally, including the potential for a dual market listing. We believe the company's current share price significantly undervalues the prospects of the combined businesses.

<b>Olivia Manser</b>	olivia.manser@stifel.com	+44 (0) 20 7710 7495
<b>Christian Glennie</b>	christian.glennie@stifel.com	+44 (0) 20 7710 7454
<b>UK Sales desk</b>		+44 (0) 20 7710 7600

Price (21 July 2016)		€1.33
<b>Changes</b>	<b>Previous</b>	<b>Current</b>
Rating	-	BUY
Target Price	€6.50	€2.63



Key data	
Stock code	ALNOV FP
Market cap (€m)	19
CAC	4,376
1mth perf (%)	(7.0)
3mths perf (%)	(8.9)
12mths perf (%)	(74.9)
12mth high-low (€)	5 - 1
Free float (%)	77

Key financials			
Year to Dec	2015A	2016E	2017E
Sales (€)	8.9	13.3	17.8
EBIT adj	(3.24)	(1.50)	0.33
EBIT margin (%)	(145.7)	(12.8)	0.7
EPS adj (c)	(204.9)	(18.8)	(5.4)
EV/EBITDA (x)	0.5	4.9	(12.1)
PE adj (x)	NA	NA	NA
DPS (c)	0	0	0
Div yield (%)	0	0	0
FCF yield (%)	0	0	0

Prices are as of close 21 July 2016  
All sources unless otherwise stated: Company data, FactSet, Stifel estimates

Completed: 22 July 2016 03:48EDT  
Disseminated: 22 July 2016 03:48EDT

Stifel does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. All relevant disclosures and certifications appear on pages 8 - 10 of this report.

## Key data<sup>1</sup>

Key valuation ratios (x)				
	2015A	2016E	2017E	2018E
PE adj (x)	NA	NA	NA	NA
Div yield (%)	0	0	0	0
Key profit and loss data (€)				
	2015A	2016E	2017E	2018E
Sales (€)	8.9	13.3	17.8	20.6
EBITDA adj	(3.0)	(1.1)	0.7	1.6
EBIT adj	(3.24)	(1.50)	0.33	1.09
EBIT adj margin (%)	(36.2)	(11.3)	1.9	5.3
Net income	(13.9)	(2.1)	(0.8)	(0.0)
EPS adj (c)	(204.9)	(18.8)	(5.4)	(0.0)
DPS (c)	0	0	0	0
Key cash flow data (€)				
	2015A	2016E	2017E	2018E
Operating profit	(13.0)	(1.7)	0.1	0.9
Operating cash flow	(5.3)	(1.8)	(0.8)	(0.0)
Taxes paid	0	0	0	0
Net interest	(0.7)	(0.4)	(0.9)	(0.9)
Capex	(0.8)	(0.7)	(0.9)	(1.0)
Free cash flow	(6.9)	(2.9)	(2.6)	(1.9)
Dividends	0	0	0	0
Change in cash	(1)	(0)	(3)	(6)
Net debt	(1.5)	(5.6)	(9.0)	(11.2)
Key balance sheet (€)				
	2015A	2016E	2017E	2018E
Cash	2	2	(2)	(8)
Net assets	11	8	6	6

## Key information

### Target price methodology/risks

Our target price for Novacyt of €2.69 is based on our belief that shares can trade on a forward EV/Sales of 3.5x and our DCF model assuming a discount rate of 12.5% and terminal growth of 2%.

Risks to the achievement of our target price include market acceptance of the NOVAPrep system failing to materialise, gross margins failing to improve as anticipated, and potential changes to reimbursement policy.

### Business description

Novacyt develops, manufactures and supplies diagnostic tests for infectious diseases and cancer screening cytology to diagnostic laboratories.

### Senior management

Graham Mullis (CEO)

Anthony Dyer (FD)

Jean-Pierre Crinelli (COO)

Eric Peltier (CIO)

### Key dates

27 October 2016 - First half 2016 financial results

April 2017 - 2016 financial results

June 2017 - AGM

### Major shareholders

SAS Cup 92 (founders) - 19.9%

Aurinvest Capital - 9.9%

Merlin residual investment Ltd - 8.1%

### Website

[www.novacyt.com](http://www.novacyt.com)

<sup>1</sup> Year end December  
Data in millions, except per share and percentages  
Source: Company data, FactSet, Stifel estimates

## Primer Design

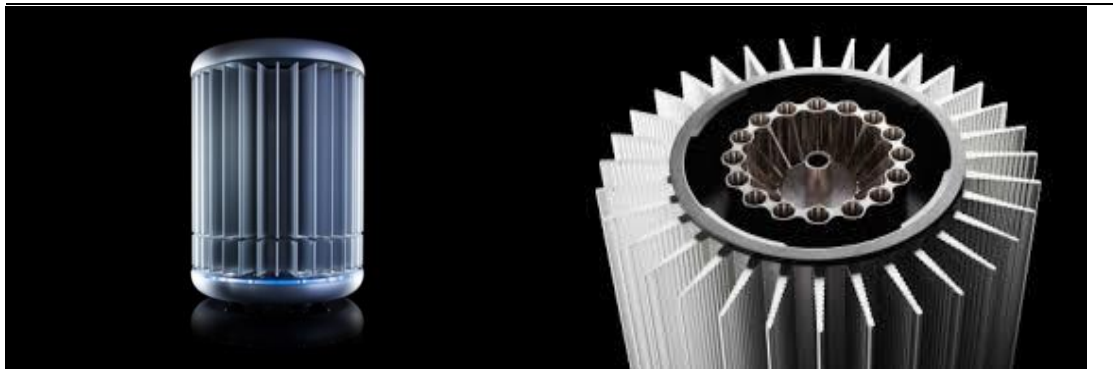
Primer Design Ltd was founded in 2005 within Southampton University School of Medicine. It specialises in developing, manufacturing and marketing rapid, real-time PCR (qPCR) (see later section) kits, reagents and instruments and has established a portfolio of over 450 research-only, molecular assays, sold into academic and industrial markets in over 100 countries. The business generated revenue of £3.9m (€5.3m) and EBTDA of £1.3m (€1.8m) in 2015, having established a three-year compound annual growth rate of 32%. In its first two months of integration with Novacyt, Primer Design contributed 20% to group revenue in 1H16, with sales of €0.98m, and it is expected to significantly enhance sales and profitability during the second half of the year.

Primer Design has established a broad range of reagents and kits with an emphasis on infectious diseases and oncology for a number of different markets, including human pathology, veterinary and agriculture, food and water testing and bio-threat detection. The company has established a reputation with research organisations and academia, but to date has not expanded into clinical markets given the investment, regulatory expertise and marketing focus that this would entail.

### Genesig

Primer Design has developed the genesig platform, a range of over 400 proprietary qPCR reagents and kits and the genesig q16 (**Figure 1**), a “portable, affordable and easy to use” open platform real-time PCR instrument, aiming to make the process of qPCR testing easier and more accessible to the user. The instrument is small (a 12 cm footprint) with a list price of £3,995.

**Figure 1: The genesig q16 instrument**



*Source: Primer Design*

### Real time PCR

PCR (polymerase chain reaction) is a process that has been used for 30 years to amplify nucleic acid samples to allow better detection and analysis of genes and their function. It has become a fundamental element of molecular biology research and molecular diagnostic tests. Standard PCR processes involve a primer (a specific, small, section of DNA that binds to the gene of interest), a DNA polymerase enzyme and a thermo-cycling process that results in a specific sequence being amplified so it can be more easily detected and analysed. Once the PCR reaction is complete, the amplified sample usually needs to be extracted or separated on a gel.

Real Time PCR or qPCR adopts the same principles as standard PCR, but uses fluorescence markers during the reaction so that the process can be monitored as it proceeds, eliminating the need to separate the end product and providing an instantly quantitative analysis of the gene expression. The ability to quantify gene expression is particularly important when developing molecular diagnostic assays. One of the critical elements when developing effective qPCR assays and kits is in the construction of the primers that are used, as these specify which sequence of DNA is being amplified and how efficient the test will be.

Primer Design has established itself as an expert in developing qPCR primers, kits and reagents and has developed a full range of instruments and assays that simplifies the process for researchers.

## Lab 21

Novacyt's Lab21 business is a personalised medicine, diagnostic specialist supporting healthcare providers and the pharma and biotech industries with technically advanced products and services. It operates fully accredited service laboratories in Cambridge (UK) whilst also developing and manufacturing its own products for use in laboratories worldwide. The company has over 200 marketing and distribution partners across the business, some of which could be used to leverage Novacyt's products.

Lab21 currently develops and manufactures a range of immunoassay and molecular *in vitro* diagnostic products for use in a clinical and research setting. These include a range of tests to detect the presence of infectious diseases such as syphilis, cytomegalovirus (CMV), malaria, Chagas disease rotavirus and HIV. The portfolio also includes a range of oncology and companion diagnostic tests to evaluate genetic markers such as EGFR, KRAS and BRAF. The business is divided into three main divisions:

### Lab21 Healthcare – haematology and serology

Lab21 Healthcare is currently the largest division by revenue and supplies a subset of the Lab21 portfolio including tests for syphilis, malaria, TB, CMV and Chagas to blood donor screening/blood banks in over 115 countries. The portfolio includes both finished kits and bulk reagents.

### Microgen – Microbiology

This division forms the second-largest part of the Lab21 business, supplying hospital laboratories with products for use in routine clinical diagnostic tests and food laboratories with tests detect dangerous bacterial and fungal infections.

### Services

Lab21's clinical labs division provides high-end molecular diagnostic services for patients, clinicians and the pharmaceutical industry, based at the company's testing facility in Cambridge. The division is mostly UK-based and uses Lab21 diagnostic products to provide services that include oncology, HIV, viral hepatitis, and drug management tests.

## Acquisition synergies

There are clear similarities between Primer Design and Novacyt's (Lab21) business given the focus on infectious disease and oncology diagnostic products. However, product overlap is limited and the two businesses complement each other very well, with Primer Design adding its molecular diagnostic technology to Lab21's predominantly immunoassay based portfolio of products. We believe the acquisition provides Novacyt with a number of benefits.

- **Incremental revenue stream/critical mass** – The merger of the two businesses has provided Novacyt with an incremental, annualised revenue stream of over €6m (Stifel estimates) in 2016 and has given it greater critical mass.
- **Profitability** – With the addition of such a profitable business, our forecasts assume that the enlarged group will be EBITDA positive in 2016 and in cash terms should be self-sustaining from 2017, which significantly de-risks the business, in our view.
- **Operational leverage/synergies** – We anticipate significant operational leverage and synergies to be extracted, although these have yet to be detailed by the company.
- **Expansion of Primer Design portfolio into clinical applications** – Currently Primer Design supplies assays for research use only and has established a good network and customer base among academic institutions. However, it has recognised the potential of moving into clinical use assays as well, but the investment, regulatory burden and change in distribution required has prevented it from altering its strategy in this way. With Lab21's established presence in the clinical diagnostic space, management believes that applying Primer Design technology and products in this way is now a manageable prospect and could be a source of incremental growth for the group.

- **Expansion of Lab21's portfolio** – Using specific Primer Design assays, Lab21 should be able to expand its own pipeline of molecular products and fill out its product offering to industrial and clinical markets.

## Forecasts

We attach our forecasts below, which include eight months' revenue contribution from the Primer Design business, and revised NovaPrep growth to account for the slower-than-expected roll-out of the product. We have assumed a gross margin for Primer Design of 77%, but with the introduction and anticipated increase of genesig q16 instrument sales we have assumed that the gross margin drops over the next couple of years.

Figure 2: Primer Design forecasts

€m	2016E	2016E	2016E	2016E	2017E	2018E	2019E	2020E	2021E
Year ending	Dec	H1	H2	Dec	FY	FY	FY	FY	FY
	FY			8 months					
<b>Revenue (£m)</b>	<b>5</b>	<b>0.98</b>							
Growth	26%								
€/£ exchange	1.25								
<b>Revenue</b>	<b>6.25</b>	<b>0.98</b>	<b>3.2</b>	<b>4.2</b>	<b>7.2</b>	<b>8.6</b>	<b>9.8</b>	<b>11</b>	<b>12.2</b>
	15%				15%	19%	14%	12%	11%
	-1.4	-0.2	-0.7	-1.0	-1.7	-2.1	-2.4	-2.6	-2.9
<b>Gross profit</b>	<b>4.8</b>	<b>0.7</b>	<b>2.5</b>	<b>3.2</b>	<b>5.5</b>	<b>6.5</b>	<b>7.4</b>	<b>8.4</b>	<b>9.3</b>
<i>Gross margin</i>	<i>77.0%</i>	<i>75.0%</i>	<i>77.0%</i>	<i>77.0%</i>	<i>76.0%</i>	<i>76.0%</i>	<i>76.0%</i>	<i>76.0%</i>	<i>76.0%</i>
Operating expenses	-2.9	-0.4	-1.4	-1.8	-2.9	-3.4	-3.7	-4.1	-4.5
<b>Operating profit</b>	<b>1.9</b>	<b>0.3</b>	<b>1.1</b>	<b>1.4</b>	<b>2.6</b>	<b>3.2</b>	<b>3.7</b>	<b>4.3</b>	<b>4.8</b>
D&A	0.1	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
EBITDA	2.0	0.4	1.1	1.5	2.7	3.3	3.8	4.4	4.9
<i>EBITDA margin</i>	<i>32%</i>	<i>36%</i>	<i>32%</i>	<i>36%</i>	<i>37%</i>	<i>38%</i>	<i>39%</i>	<i>40%</i>	<i>40%</i>

Source: Company data, Stifel estimates

Figure 3: Novacyt Income Statement (€m)

Year ending December	2015A	2016E	2017E	2018E	2019E	2020E
Lab 21	7.6	7.2	8.1	8.6	9.4	10.1
Novacyt	1.3	1.9	2.6	3.4	4.7	6.6
Primerdesign		4.2	7.2	8.6	9.8	11.0
<b>Total revenues</b>	<b>8.9</b>	<b>13.3</b>	<b>17.8</b>	<b>20.6</b>	<b>23.8</b>	<b>27.7</b>
<i>Growth</i>	97%	49%	34%	15%	16%	16%
COGS (€m)	-4.7	-5.5	-6.9	-7.7	-8.8	-10.2
<b>Gross profit (€m)</b>	<b>4.3</b>	<b>7.8</b>	<b>11.0</b>	<b>12.9</b>	<b>15.0</b>	<b>17.5</b>
<i>Gross margin</i>	48%	58%	62%	63%	63%	63%
General and admin	-4.8	-4.5	-4.6	-4.7	-4.8	-4.9
Sales and marketing	-2.3	-2.5	-2.7	-3.1	-3.5	-4
R&D	-0.6	-0.6	-0.6	-0.8	-0.9	-1.1
Primerdesign costs		-1.8	-2.9	-3.4	-3.7	-4.1
Subsidies	0.1	0.2	0.2	0.2	0.2	0.2
<b>Total operating expenses</b>	<b>-7.5</b>	<b>-9.3</b>	<b>-10.6</b>	<b>-11.8</b>	<b>-12.8</b>	<b>-13.9</b>
<b>EBITA (pre-exceptional)</b>	<b>-3.2</b>	<b>-1.5</b>	<b>0.3</b>	<b>1.1</b>	<b>2.3</b>	<b>3.6</b>
<i>Operating margin</i>			1.9%	5.3%	9.5%	13.0%
Amortisation	-9.8	-0.2	-0.2	-0.2	-0.2	-0.2
<b>EBIT (pre-exceptional)</b>	<b>-13.0</b>	<b>-1.7</b>	<b>0.1</b>	<b>0.9</b>	<b>2.1</b>	<b>3.4</b>
Exceptional						
Other income/expense	-0.2					
Finance costs	-0.7	-0.4	-0.9	-0.9	-0.5	-0.1
<b>Pre-tax (loss) profit</b>	<b>-13.9</b>	<b>-2.1</b>	<b>-0.8</b>	<b>0.0</b>	<b>1.6</b>	<b>3.3</b>
Tax	0.0	0	0	0	0	-0.7
<b>Net income</b>	<b>-13.9</b>	<b>-2.1</b>	<b>-0.8</b>	<b>0.0</b>	<b>1.6</b>	<b>2.7</b>
NOSH	6.8	11.3	14.0	14.1	14.2	14.3
EPS (€)	-2.0	-0.19	-0.05	0.00	0.11	0.19

Source: Company data, Stifel estimates

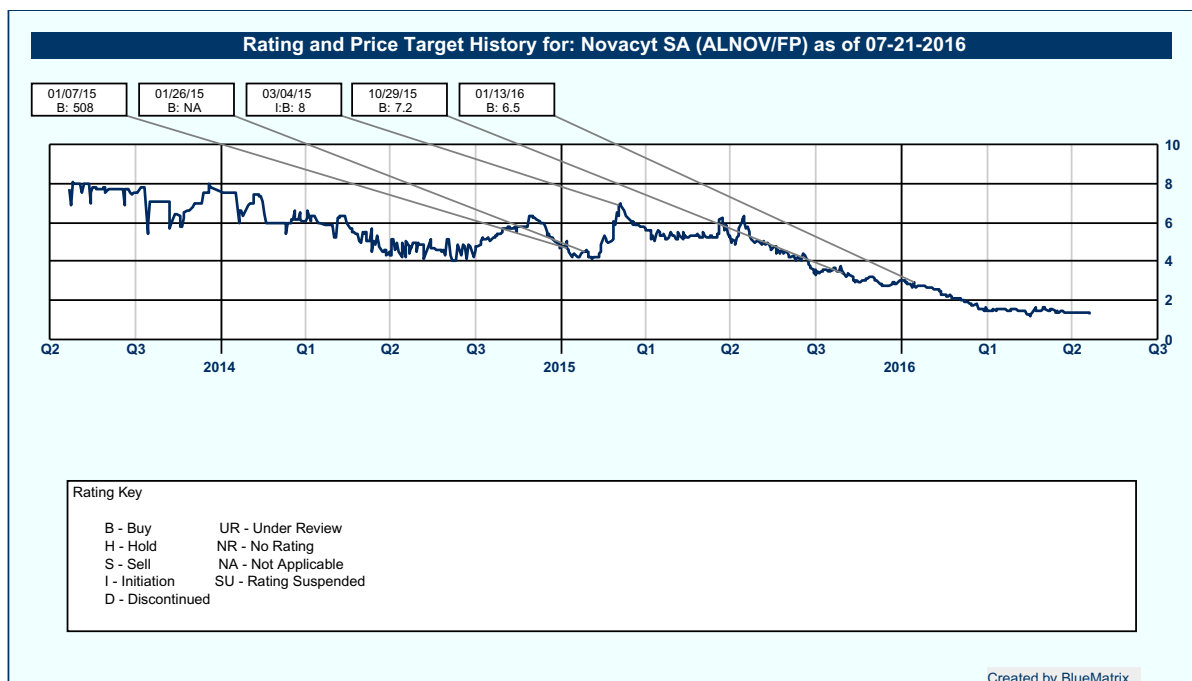
Figure 4: Novacyt cash flow forecasts (€m)

Year ending Dec	2013	2014	2015	2015E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Net income</b>	<b>-1.0</b>	<b>-3.9</b>	<b>-2.7</b>	<b>-11.2</b>	<b>-13.9</b>	<b>-2.1</b>	<b>-0.8</b>	<b>0.0</b>	<b>1.6</b>	<b>2.7</b>
Depreciation	0.4	0.3	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7
Amortisation			1.0	8.8	9.8	0.2	0.2	0.2	0.2	0.2
(Increase)/decrease in inventory	0.0	-0.1	-0.1	0.0	-0.1	-0.3	-0.4	-0.5	-0.5	-0.5
(Increase)/decrease receivables	0.1	0.0	-0.1	0.0	-0.1	-0.5	-0.7	-0.7	-0.7	-0.7
Increase/(decrease) in creditors	-0.3	1.5	0.0	-1.7	-1.7	0.5	0.5	0.5	0.5	0.5
W cap adjustment on merger										
Change in working capital	-0.2	1.4	-0.2	-1.7	-1.9	-0.3	-0.6	-0.7	-0.7	-0.7
Other	-0.1	0.1			0.4					
<b>Operating cashflow</b>	<b>-0.8</b>	<b>-2.1</b>	<b>-2.8</b>	<b>-2.5</b>	<b>-5.3</b>	<b>-1.8</b>	<b>-0.8</b>	<b>0.0</b>	<b>1.7</b>	<b>2.8</b>
Capital expenditure	-0.6	-0.5	-0.1	-0.7	-0.8	-0.7	-0.9	-1	-1.1	-1.2
Transaction costs	1.1	1.1	-0.2	-0.1	-0.3					
Acquisition						-6.6	-1.8	-1.2		
<b>Cashflow before financing</b>	<b>-0.3</b>	<b>-1.5</b>	<b>-3.1</b>	<b>-3.3</b>	<b>-6.4</b>	<b>-9.1</b>	<b>-3.5</b>	<b>-2.2</b>	<b>0.6</b>	<b>1.6</b>
Capital increase	1.6	3.1	2.0	2.2	4.2	5.1				
Repayment of debt	-0.9	-0.2	-0.1	1.6	1.5	3.75	0	-3.5	-3	0
Other/increase in debt			0.0	0.0						
Forex	0.0	0.0			0.0					
<b>Change in cash</b>	<b>0.4</b>	<b>1.5</b>	<b>-1.2</b>	<b>0.6</b>	<b>-0.6</b>	<b>-0.3</b>	<b>-3.5</b>	<b>-5.7</b>	<b>-2.4</b>	<b>1.6</b>
Cash at start of period	0.6	1.0	2.5	1.3	2.5	1.8	1.6	-1.9	-7.6	-10.0
<b>Cash at end of period</b>	<b>1.0</b>	<b>2.5</b>	<b>1.3</b>	<b>1.8</b>	<b>1.8</b>	<b>1.6</b>	<b>-1.9</b>	<b>-7.6</b>	<b>-10.0</b>	<b>-8.4</b>
Debt		1.021	1.5	3.37	3.373	7.12	7.12	3.6	0.6	0.6
<b>Net cash/(debt)</b>		<b>1.5</b>	<b>(0.2)</b>	<b>(1.5)</b>	<b>(1.5)</b>	<b>(5.6)</b>	<b>(9.0)</b>	<b>(11.2)</b>	<b>(10.6)</b>	<b>(9.0)</b>

Source: Company data, Stifel estimates

## Important Disclosures and Certifications

We, Olivia Manser and Christian Glennie, certify that our respective views expressed in this research report accurately reflect our respective personal views about the subject securities or issuers; and we, Olivia Manser and Christian Glennie, certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research report. Our European Policy for Managing Research Conflicts of Interest is available at [www.stifel.com](http://www.stifel.com).



For a price chart with our ratings and any applicable target price changes for ALNOV.FP go to <http://sf.bluematrix.com/bluematrix/Disclosure?ticker=ALNOV.FP>

Stifel or an affiliate has received compensation for investment banking services from Novacyt SA in the past 12 months.

Stifel or an affiliate expects to receive or intends to seek compensation for investment banking services from Novacyt SA in the next 3 months.

Novacyt SA is provided with investment banking services by Stifel or was provided with investment banking services by Stifel or an affiliate within the past 12 months.

Novacyt SA is a client of Stifel or an affiliate or was a client of Stifel or an affiliate within the past 12 months.

The rating and, where applicable, target price history for Novacyt SA and its securities prior to March 1, 2015 on the above price chart reflects research analyst views at Oriel Securities Limited (Oriel), which has now been integrated into the Stifel research platform. Oriel utilized an investment rating system that was different from the rating system currently utilized at Stifel. For a description of the investment rating system previously utilized by former Oriel research analysts during the past three years, go to

<http://www.stifel.com/docs/pdf/disclosures/Europe/Former%20Oriel%20Investment%20Rating%20System.pdf>

Stifel or an affiliate is a corporate broker and/or advisor to Novacyt SA.

The equity research analyst(s) responsible for the preparation of this report receive(s) compensation based on various factors, including Stifel's overall revenue, which includes investment banking revenue.

Our investment rating system is three tiered, defined as follows:

**BUY** -We expect a total return of greater than 10% over the next 12 months with total return equal to the percentage price change plus dividend yield.

**HOLD** -We expect a total return between -5% and 10% over the next 12 months with total return equal to the percentage price change plus dividend yield.

**SELL** -We expect a total return below -5% over the next 12 months with total return equal to the percentage price change plus dividend yield.

Occasionally, we use the ancillary rating of **SUSPENDED** (SU) to indicate a long-term suspension in rating and/or target price, and/or coverage due to applicable regulations or Stifel policies. **SUSPENDED** indicates the analyst is unable to determine a "reasonable basis" for rating/target price or estimates due to lack of publicly available information



or the inability to quantify the publicly available information provided by the company and it is unknown when the outlook will be clarified. **SUSPENDED** may also be used when an analyst has left the firm.

Of the securities we rate, 49% are rated Buy, 42% are rated Hold, 3% are rated Sell and 6% are rated Suspended.

Within the last 12 months, Stifel or an affiliate has provided investment banking services for 15%, 7%, 0% and 13% of the companies whose shares are rated Buy, Hold, Sell and Suspended, respectively.

### Additional Disclosures

Please visit the Research Page at [www.stifel.com](http://www.stifel.com) for the current research disclosures and respective target price methodology applicable to the companies mentioned in this publication that are within Stifel's coverage universe. For a discussion of risks to target price please see our stand-alone company reports and notes for all Buy-rated and Sell-rated stocks.

The information contained herein has been prepared from sources believed to be reliable but is not guaranteed by us and is not a complete summary or statement of all available data, nor is it considered an offer to buy or sell any securities referred to herein. Opinions expressed are subject to change without notice and do not take into account the particular investment objectives, financial situation or needs of individual investors. Employees of Stifel, or its affiliates may, at times, release written or oral commentary, technical analysis or trading strategies that differ from the opinions expressed within. Past performance should not and cannot be viewed as an indicator of future performance.

As a multi-disciplined financial services firm, Stifel regularly seeks investment banking assignments and compensation from issuers for services including, but not limited to, acting as an underwriter in an offering or financial advisor in a merger or acquisition, or serving as a placement agent in private transactions.

### Affiliate Disclosures

"Stifel", includes Stifel Nicolaus & Company ("SNC"), a US broker-dealer registered with the United States Securities and Exchange Commission and the Financial Industry National Regulatory Authority and Stifel Nicolaus Europe Limited ("SNEL"), which is authorized and regulated by the Financial Conduct Authority ("FCA"), (FRN 190412) and is a member of the London Stock Exchange.

**Registration of non-US Analysts:** Any non-US research analyst employed by SNEL contributing to this report is not registered/qualified as a research analyst with FINRA and is not an associated person of the US broker-dealer and therefore may not be subject to FINRA Rule 2241 or NYSE Rule 472 restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account.

### Country Specific and Jurisdictional Disclosures

**United States:** Research produced and distributed by SNEL is distributed by SNEL to "Major US Institutional Investors" as defined in Rule 15a-6 under the US Securities Exchange Act of 1934, as amended. SNEL is a non-US broker-dealer and accordingly, any transaction by Major US Institutional Investors in the securities discussed in the document would need to be effected by SNC. SNC may also distribute research prepared by SNEL directly to US clients that are professional clients as defined by FCA rules. In these instances, SNC accepts responsibility for the content. Research produced by SNEL is not intended for use by and should not be made available to retail clients, as defined by the FCA rules.

**Canadian Distribution:** Research produced by SNEL is distributed in Canada by SNC in reliance on the international dealer exemption. This material is intended for use only by professional or institutional investors. None of the investments or investment services mentioned or described herein is available to other persons or to anyone in Canada who is not a "permitted client" as defined under applicable Canadian securities law.

**UK and European Economic Area (EEA):** This report is distributed in the EEA by SNEL, which is authorized and regulated in the United Kingdom by the FCA. In these instances, SNEL accepts responsibility for the content. Research produced by SNEL is not intended for use by and should not be made available to non-professional clients.

The complete preceding 12-month recommendations history related to recommendation(s) in this research report is available at <https://stifel2.bluematrix.com/sellside/MAR.action>

**Brunei:** This document has not been delivered to, registered with or approved by the Brunei Darussalam Registrar of Companies, Registrar of International Business Companies, the Brunei Darussalam Ministry of Finance or the Autoriti Monetari Brunei Darussalam. This document and the information contained within will not be registered with any relevant Brunei Authorities under the relevant securities laws of Brunei Darussalam. The interests in the document have not been and will not be offered, transferred, delivered or sold in or from any part of Brunei Darussalam. This document and the information contained within is strictly private and confidential and is being distributed to a limited number of accredited investors, expert investors and institutional investors under the Securities Markets Order, 2013 ("Relevant Persons") upon their request and confirmation that they fully understand that neither the document nor the information contained within have been approved or licensed by or registered with the Brunei Darussalam Registrar of

Companies, Registrar of International Business Companies, the Brunei Darussalam Ministry of Finance, the Autoriti Monetari Brunei Darussalam or any other relevant governmental agencies within Brunei Darussalam. This document and the information contained within must not be acted on or relied on by persons who are not Relevant Persons. Any investment or investment activity to which the document or information contained within is only available to, and will be engaged in only with Relevant Persons.

In jurisdictions where Stifel is not already licensed or registered to trade securities, transactions will only be affected in accordance with local securities legislation which will vary from jurisdiction to jurisdiction and may require that a transaction carried out in accordance with applicable exemptions from registration and licensing requirements. Non-US customers wishing to effect transactions should contact a representative of the Stifel entity in their regional jurisdiction except where governing law permits otherwise. US customers wishing to effect transactions should contact their US salesperson.

The recommendation contained in this report was produced at 22 July 2016 03:48EDT and disseminated at 22 July 2016 03:48EDT.

The securities discussed in this report may not be available for sale in all jurisdictions and may have adverse tax implications for investors. Clients are advised to speak with their legal or tax advisor prior to making an investment decision.

**Additional Information is Available Upon Request**

© 2016 Stifel. This report is produced for the use of Stifel customers and may not be reproduced, re-distributed or passed to any other person or published in whole or in part for any purpose without the prior consent of Stifel. Stifel Nicolaus Europe Ltd. 150 Cheapside, London, EC2V 6ET. Registered in England Number 03719559