

THE VALUE OF ORGANIC GROWTH

Stefano Marchese, Chief Executive Officer

It's not surprising that many executives think about growth primarily in terms of acquisitions. For some, opportunities to grow organically are limited, especially in maturing or contracting product markets. Others are drawn to the allure of high-profile deal making, with its virtually instant boost to revenues and often earnings per share as well.

But executives shouldn't underestimate the power of organic growth. It may take more time and effort to affect a company's size, but organic growth typically generates more value. A look at the share-price performance of 550 US and European companies over 15 years reveals that for all levels of revenue growth, those with more organic growth generated higher shareholder returns than those whose growth relied more heavily on acquisitions. The main reason is that companies don't have to invest as much up front for organic growth. In growing through acquisition, companies typically have to pay for the stand-alone value of an acquired business plus a takeover premium. This results in a lower return on invested capital compared with growing organically.

We often see companies pass up organic-growth opportunities because they take longer to boost earnings than acquisitions do. But, given an option, they should probably tip the balance toward what they can achieve organically.

NEW CHORUS KITS FOR ANTI EBV-VCA ANTIBODY IGM AND IGG

Dario Soldateschi, Chief of R&D and Biotechnologies

Epstein-Barr virus (EBV), the Human Herpesvirus 4, is a DNA virus belonging to the *Herpesviridae* family. It is about 120-180 nm in diameter and is provided with pericapsid. EBV was shown to be the causative agent of infectious mononucleosis (IM), a disease characterized by fever, sore throat, enlarged lymph nodes in the neck, and feeling tired. The liver or spleen may also become swollen. In less than one percent of cases splenic rupture may occur. EBV has also been implicated in several diseases other than IM, including Burkitt's lymphoma Hodgkin's lymphoma, gastric cancer and nasopharyngeal carcinoma. During IM antibodies directed against unrelated antigens, like those present in some animal red blood cells, develop. These heterophile antibodies has been used to develop diagnostic tests for IM. These tests are not very specific, as pathological conditions other than IM may

cause the appearance of such antibodies, nor sensitive, as often they are not present in children with IM. A correct diagnosis can only be made using specific viral antigens to detect different types of anti-

	Acute infection	Recent infection	Past infection
EBV VCA IgM	+	+/-	-
EBV VCA IgG	+/-	+	+
EBVEA	+/-	+/-	+/-
EBNA	-	+/-	+

bodies. During EBV infection, the host antibody response is directed toward different complexes of antigens, the most important of which, for the distinction of acute from past infection, are the Viral Capsid Antigen (VCA), The Early Antigens (EA) and the Epstein-Barr Nuclear Antigen (EBNA). The interpretation of the serology test is shown in the table below.

Regarding the VCA complex, different antigens have been utilized by *in vitro* diagnostic manufacturers for their kits: lysates of cell cultures in which the virus replication was induced, recombinant or affinity

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DIESSE'S CHECK-UP

Catia Perazzolo, Accounting Department

Every three months, DIESSE makes a check-up in order to see if it is financially and economically healthy.

Here are the results of its last check-up, referred to the period Jan. 1, 2016 - September 30, 2016 compared to Jan. 1 - September 30, 2015:

Consolidated figures (€ k.)	3Q2016	3Q2015	3Q2016/ 3Q2015
Value of production	€ 16.167	€ 16.636	97%
EBITDA	€ 3.130	€ 3.484	90%
EBIT	€ 1.883	€ 1.739	108%
Profit from ordinary activity before tax	€ 641	€ 442	145%
Net financial position at the end of the period	€ 15.553	€ 14.120	110%

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AUTO DAT: A MODERN INSTRUMENT FOR OLD METHODS.

Carlo Paoli, Chief Strategy Officer

An original instrument for the automation of agglutination reactions has been developed by the R&D Instruments.

The instrument consists of a core component that can be assimilated to a laboratory rotating shaker.

This mobile stand is inserted in a closed body to avoid the interference of the external lights.

All the tests have the common characteristics to be performed in microwells of 96 tests microtiter plates.

The plate is lightened from the bottom and the microwells are "read" by two cameras. The images are recorded and processed.

A software, which has been properly developed with this aim, analyses the shots and expresses the result in titer, as usually with any agglutination test.

The microplates preparation (addition of samples and reagents) can be manually conducted. Alternatively it can be used any type of Elisa microplates platform, programming the run according to the IFU of the reagents.

Certainly the best way remains the use of a small optional instrument by Diesse, "FollowMe", as described further below.

The reaction occurs at room temperature and requires, on average, 15 minutes/plate. During this period, after an initial shake to mix the sample and the reagent, the plate rotates at a constant speed helping, in this way, the formation of agglutinates. The reaction mix changes from homogeneous to not homogeneous for the presence of aggregates when a sample is reactive.

These aggregates are measured and associated to a titer of the sample that varies on the basis of the type of reaction.

The result can be printed to finalize the operation.

The AutoDAT instrument needs to be directed by an external com-

puter that can be already available in the laboratory.

Preferably Diesse proposes an external unit that, together with a small printer, makes the system completely autonomous.

The printing of the result appears differently depending on how the working plan was programmed.

If the customer conducts a manual preparation according to a personal scheme, the result will be reported in titers linking it to the alphanumeric coordinates that identify each well of the 96 tests microplate. For example: A1 Neg; A2 1/160; A3 Neg etc...

Diesse also proposes a small optional instrument "FollowMe" that leads the operator in the preparation of the working plan. Briefly, it is composed of a stand, with the same dimensions of the microplate, lightened by 96 LEDs of different colors that change during the phases of preparation of the wells.

The use of this instrument presents several advantages, beyond facilitating the dispensing of samples and reagents:

- The sample barcode can be linked to the reagent of a specific microwell, so that test result will be directly connected to the sample and the report will indicate the performed test and the obtained result for patient X.
- It can receive the working plan from the Host Computer.
- It can automatically print the results of the run and send it to the Host Computer.

The tests that can be performed with this instrument are:

Widal Wright reactions with Febrile Antigen suspensions
(Salmonella and Brucella)

Weil Felix reactions with Proteus suspensions
RPR test (semi quantitative assay of reagins in syphilis infection)

Anti T.pallidum antibodies titration test like TPHA

Mononucleosis latex test

CRP latex test

RF latex test

ASO latex test

DIESSE MARKETING DEPARTMENT IS LISTENING TO YOU

Tatiana Zoppi, Marketing Intelligence Analyst

DIESSE Diagnostica Senese is developing new innovative products under the guidance of the Marketing department, whose people are trying to lead their research to the development of diagnostic kits designed for the customer, which meet their needs and those of the diagnostic market all over the world.

DIESSE Marketing department started to implement a *push and pull* strategy to create new products and expand its market. It is not only DIESSE or companies that need to sell products trying to persuade customers to buy them; but the customers themselves, who through their requests, ask companies for the desired products with very specific characteristics. DIESSE began to listen to its customers and their demands, developing its first revolutionary tool for measuring ESR: the "MINI-CUBE".

"MINI-CUBE", so called because of its small size and suitable for doctor's offices where the new software featuring a color touchscreen, makes the use of the device easy and intuitive. Inside, vari-

ous options were added to best meet the needs of customers: ESR measurement is detected in real time through the images reported by the software; the customers and QC's database makes traceability of data easy and the possibility to connect via Bluetooth to tablet, PC or smartphone, making the consultation of data always accessible thanks to a dedicated app.

In addition to these innovative features, in this instrument has been introduced the DAS28 calculator starting directly from the measured ESR value, in order to help the rheumatologists monitoring the disease on the basis of the prescribed treatment, thus evaluating its therapeutic effectiveness; **a diagnostic tool more and more interactive and easy to use.**

The new web site was renovated, making it easier to consult the products, but above all to contact with customers, implementing the site with social media connections and networks and with a contact form, DIESSE with MINI-CUBE and other new projects wants to bring to market more and more innovative products closer to customers, **because DIESSE marketing department now is listening to you!**

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purified glycoprotein gp125, recombinant proteins p18 and p23 and synthetic peptides representing epitopes of the described proteins. With the aim of increasing the performances of the I generation tests (Chorus Epstein-Barr VCA IgM cod. 81056 and Chorus Epstein-Barr VCA IgG cod. 81057), realized with a viral lysate, Diesse undertook a study of the performances of different antigens for the detection of IgM and IgG antibodies against the VCA complex. Immunopurified gp125, an affinity purified viral glycoproteins complex, recombinant p18 and p23, alone or together, and a synthetic antigen designed by our R&D team were evaluated with a panel of 179 well characterized human sera in comparison with a well-known competitor test. Discordant results were resolved by Indirect Immunofluorescence (IIF) test. It was found that the best antigens for IgM or IgG detection differ. Relying on these data, the R&D team developed the second generation tests for the Chorus instrument, namely the Chorus Epstein-Barr VCA IgM II (cat. 81054) already on the market, and the forthcoming Chorus Epstein-Barr VCA IgG II (cat. 81053). These kits employ well defined purified antigens that avoid the variability in test results caused by raw antigens preparations whose composition is not well known and can vary from batch to batch. The performances of these kits, obtained testing more than 500 human sera in comparison with a well-known manufacturer test and resolving the discordant samples with IIF, are as follows:

PERFORMANCES OF CHORUS EBV-VCA KITS		
	Epstein-Barr VCA IgG cat. 81053	Epstein-Barr VCA IgM cat. 81054
Sensitivity	96,7	100,0
Specificities	98,9	98,3

Diesse Diagnostica Senese S.p.A. has a complete line of Chorus kits for the serological diagnosis of EBV infection: VCA IgG and IgM, EA IgG and IgM and EBNA IgG, all realized with well characterized purified antigens.

A COFFEE WITH...



MR. JIHAD NASSER

Welcome to the fourth issue of the section expressly created to give voice to our Distributors. Just quick a few questions and answers, as if we were having coffee together!

Mr. Jihad Nasser is Sales Manager of Samir Digital Technology, a company located in the wonderful City of Dubai, UAE, who are our Exclusive Distributors in the country for Chorus and ESR lines.



What do you like most in working with Diesse?

Unique products and team work

Which new products would you like to have on your market?

H.Pylori fecal Ag, swab test for upper respiratory virus

Which will be the next appointments (exhibitions, congresses..) where you will promote Diesse products?

Med Lab 2017

Which are the factors which lead your company to gain its position in the market?

Expanded menu of Chorus

Your country: how would you describe it to someone who never visited?

It is good to visit as it has multicultural

NEWS FROM THE WORLD

EVENTS



DUBAI, UNITED ARAB EMIRATES

Come VISIT US and SEE WHAT'S NEW

6-9 FEBRUARY 2017

Stand Z2.E38

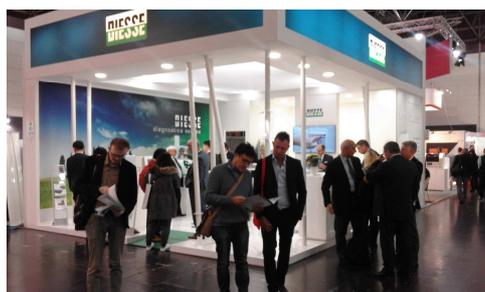


MEDLAB

MEDICA

Düsseldorf 14/17 November 2016

We have participated to the Medica for many years now. In our newly designed stand we were proud to show all our featured prototypes and instruments, namely:



- ▶ Autosampler
- ▶ Minicube
- ▶ Ves Matic Cube 30 new
- ▶ Auto-Dat

Düsseldorf, November 15th 2016, Steigenberger Park Hotel

Thanks to all those Distributors who participated to our event specially created to present our next year's projects and plans



WELCOME

We are proud to inform about our NEWLY ACQUIRED DISTRIBUTORS

- From Burkina Faso... HOSPITEQ SARL
- From Cameroon... LEVI SARL
- From Canada... FISHER SCIENTIFIC
- From Germany... ASTRA BIOTECH
- From Kenya... HOSPITAL CONSUMABLES
- From Kyrgyzstan... UNIT-REACTIVE-PHARMA
- From Mauritius... MAURI SURE
- From Sudan.... ALGAM
- From Turkey... TEKNOFARMA
- From Ukraine... BIONIKA

Kiev, International Laboratory Days LABCOMPLEX 19 October 2016

Our Distributor OMB (Ukraine) participated to a 2 hours seminar and workshop named "ESR measurement - standardization and new possibilities for HC providers", showing our MiniCube and Ves Matic Cube 30. About 120 delegates of all regions of Ukraine were present, coming from public and private labs who were able to revise instruments from Diesse. As the result of this event OMB signed first 3 years-contract with International Laboratory Group Medicover-Syneo (the biggest private lab chain in Ukraine)



DIESSE Diagnostica Senese SPA

Head Office: Via A. Solari 19, 20144 Milano, Italy

Secondary Seat: Via delle Rose 10, Loc. La Tognazza, 53035 Monteriggioni (SI), Italy.