

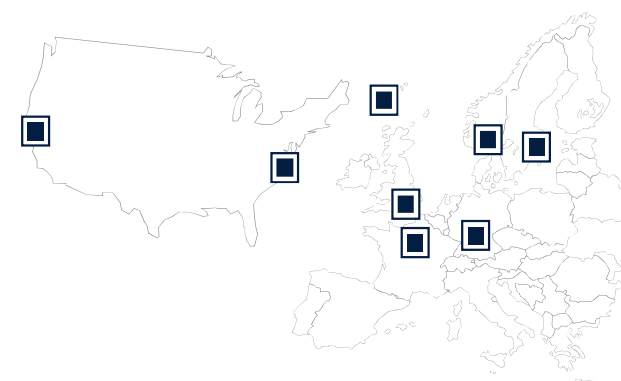
5 JUIN 2019

BRYAN, GARNIER & CO - CORPORATE RESEARCH

NOTRE HISTOIRE

- Fondée en 1996
- Banque d'investissement européenne totalement indépendante qui accompagne dans leur développement les sociétés de croissance
- Après l'Allemagne fin 2015, BG a annoncé début 2019 une acquisition en Scandinavie
- 2 métiers :
 - **Equity Sales & Research** : Recherche Actions Européenne, Corporate Access, Relations Expert, Exécution des ordres
 - **Corporate Finance** : Fusions / Acquisitions, Levées de fonds (publics et privés)
- 12 associés personnes physiques et 120 collaborateurs

NOS IMPLANTATIONS



PARIS

LONDRES

MUNICH

STOCKHOLM

OSLO

REYKJAVIK

NEW YORK

PALO ALTO

EQUITY SALES & RESEARCH

RESEARCH : 19 analystes répartis sur 3 franchises :

TECHNOLOGY / INNOVATION

8 analystes couvrant :

Logiciels
Media
Paiement, Fin Tech
Semi-conducteurs
Services informatiques
Smart Industries
Télécom

HEALTHCARE

6 analystes couvrant :

Grands Laboratoires
Biotech
Medtech

CONSUMER, BRANDS & RETAIL

5 analystes couvrant :

Alimentation, Boissons
Distribution alim. et spé.
Luxe, Cosmétiques
Optique
Produits d'entretien
Textile, Mode
Cannabis

- 13 ans d'expérience moyenne ; 40% du Bureau d'Etudes a moins de 30 ans
- Recherche écrite : Daily Mail pour chaque franchise, single stock reports, études sectorielles, White Paper
- Organisation d'événements : Club mensuels (relations experts), Conférences annuelles, Corporate roadshows
- Couverture par les mêmes analystes des Small, Mid et Larges Caps dans leur segment
- Notes publiées en français et en anglais

EQUITY SALES & RESEARCH

SALES : 15 vendeurs Actions (Paris, Londres et NYC) et sales-traders (Paris)

- 20 ans d'expérience moyenne
 - +220 clients ciblés en Europe, au Royaume-Uni et aux USA ; ils nous rémunèrent pour nos expertises sectorielles. Au-delà, nos publications de Corporate Research sont accessibles et adressées à l'ensemble des investisseurs, même dans le contexte de MIFID2, puisque payées par les Corporate,
 - Capacité prouvée en termes d'opérations d'Equity Capital Market (Pure Equity, OC) et de levées de fonds privés en Europe et aux USA : une dizaine de transactions chaque année en moyenne
 - +240 corporate roadshows organisés en 2018 dans 12 géographies différentes ; qualité reconnue tant sur le fond (investisseurs présentés) que sur la forme (fluidité des déplacements)
-

- Demande de nos clients investisseurs d'élargir notre couverture aux Small & Mid Caps sur la base d'expertises sectorielles créées à partir des Mid & Large Caps
 - Les investisseurs s'imposent de plus en plus de n'investir que dans des sociétés couvertes par deux ou trois analystes
 - Nos analystes souhaitent découvrir/approfondir certains *business models* novateurs
 - Besoin exprimé par un grand nombre de PME-ETI d'élargir/améliorer le suivi de leurs titres
 - Capacité interne chez BG à élargir notre couverture (c.180 valeurs couvertes aujourd'hui)
 - Les changements réglementaires récents (MiFID II) nous incitent à faire évoluer notre modèle
-

LE SOCLE DE NOTRE OFFRE :
LA RECHERCHE

Large note d'initiation

Mise en avant des sociétés dans nos papiers sectoriels & nos White Paper

Commentaires systématiques sur les informations importantes

CORPORATE RESEARCH - UNE OFFRE CLAIRE ET STRUCTURÉE (2/2)

OPTION 1 : LA MISE EN RELATIONS AVEC LES INVESTISSEURS CIBLES

- Investisseurs français, européens, voire américains dans le cadre de roadshows dédiés
- Ciblage optimal des investisseurs (pour sortir, quand nécessaire, des sentiers battus)
- Possibilité de participer à nos Conférences : Consumer-Brands-Retail (sept 2019), Santé (novembre 2019) et Tech (mars 2020)

OPTION 2 : CONSEIL

- Documentation financière
- Options de financement
- Réflexion stratégique, business development
- Formation des collaborateurs actionnaires / board members sur les marchés financiers...

TARIFICATION établie en fonction de vos besoins, de votre agenda et de vos objectifs

CORPORATE RESEARCH - NOS ÉLÉMENTS DE DIFFÉRENTIATION

- Proximité
 - Forte expertise sectorielle
 - Connaissance intime des investisseurs dans de nombreuses géographies grâce à nos implantations locales
 - Relation avec d'autres écosystèmes du monde de l'investissement, au-delà des small capers et des fonds généralistes habituels (fonds de crossover, family office, private equity, voire fonds de venture capital)
 - Interactions avec notre activité de banque d'affaires dans le respect des règles de compliance pour étendre notre intelligence sectorielle
 - Offre tarifaire adaptée à vos besoins spécifiques
-

ANNEXES

EXEMPLES DE NOTES D'INITIATION DE CORP. RESEARCH (40 ET 32 PAGES)

EKINOPS

Technology | Telecom

Au cœur des réseaux de nouvelle génération



Nous initions aujourd'hui la couverture d'EKINOPS, un fournisseur d'équipements et solutions de télécommunications pour opérateurs positionné sur le secteur des transmissions optiques et de l'accès IP (routeurs d'entreprises).

Nous pensons que le groupe subit aujourd'hui une décote non justifiée étant donné son potentiel de croissance. Le marché du transport optique est tiré par une hausse exponentielle des transmissions de données, tandis que sur le marché de l'accès, EKINOPS peut encore accroître ses parts de marché. Par ailleurs, la tendance à la « softwarisation » de l'industrie devrait constituer une opportunité pour un challenger comme EKINOPS, et participer à tirer les valorisations vers le haut.

Positionné sur un marché porteur, EKINOPS a par ailleurs démontré son savoir-faire technologique et sa capacité à exécuter efficacement des opérations de croissance externe.

Cet oiseau rare sur le marché mériterait à notre sens davantage d'attention de la part des investisseurs. L'action EKINOPS est aujourd'hui encore 40% inférieure à son point haut récent de début 2017, et le groupe est valorisé 7.9x l'EBITDA 2019*, là où ses pairs au même profil de croissance se payent entre 10x et 15x.

Nous initions donc EKINOPS à l'achat, avec un fair value de 5.9€, c'est-à-dire un potentiel de 32% par rapport au cours actuel.

PIXIUM VISION

Healthcare | Medtech

Love is No Longer Blind



CORPORATE - Initiation of coverage

Fair Value EUR4.1

Share price EUR1.816

Bloomberg / Reuters PIX FP/PIX.PA

Pixium Vision is a French medtech company positioned in the growing retinal implants market. The group is now fully focused on PRIMA, its most advanced proprietary platform which has the potential to partially restore central vision loss in patients suffering from advanced dry-AMD, a high unmet need with >2m patients suffering from the disease in Europe and the US. The de-risked 6 months interim results from the PRIMA first-in-human (FIH) European study are expected in late 2018 and should be a strong catalyst.

Following a recent strategic review conducted by Pixium Vision, all R&D efforts are being put into PRIMA. The initial results from the ongoing FIH study highlights: 1/ the safety of the implant's surgery, and 2/ the first clinical signs of visual pattern identification, validating the group's strategic move and further de-risking the PRIMA system and its upcoming 6 months interim results.

These results should enable Pixium Vision to move PRIMA to a pivotal trial in Europe and potentially accelerate its US development plan. A simple surgical procedure, durability, mini-invasive profile and proprietary technology are the key differentiating features making PRIMA a best-in-class platform for patients suffering from advanced dry-AMD. This should also drive adoption upon successful development and approval, and may prompt the group to evaluate PRIMA in other retinal degenerative diseases.

We value Pixium Vision at EUR4.1/share. Our valuation is based on a risk-adjusted DCF model (WACC 15.6%, B=2). We estimate peak sales in excess of EUR750m for PRIMA in advanced dry-AMD.

UNE PRODUCTION SECTORIELLE RICHE ET POINTUE (1/5)

Pharmaceuticals

Healthcare

KOL events

Novartis and Roche to transform SMA



RESEARCH AS A SERVICE

Spinal Muscular Atrophy (SMA), a genetic and rare disease. This report follows a meeting we organised with a KOL to discuss emerging SMA treatments. The disease is genetic in origin, caused by the absence of a gene (SMN1) that normally produces SMN (survival motor Neuron) protein. This protein is required to avoid destruction and death of motor neurons located in the spinal cord. These motor neurons are responsible for muscle contraction. Babies with this disease are unable to swallow, breathe and remain seated without assistance. The disease is classified under three types (Type 1, 2 and 3) depending on the number of copies of a rescue gene, the SMN2 gene, producing only a fraction of the SMN protein. Type 1 affects babies of a few months of age and represents about 60% of the affected population. Type 2 represents about 30% and affects mainly young children (6 to 18 months) and type 3 (10%) affects young children or young adults. The prevalence is about 24,000 patients with a very high mortality rate below the age of 6 months.

Few treatment options are available. Only one drug is approved as we speak: Spinraza (Biogen). However, the KOL we met recognised that the drug is at risk with the arrival of Zolgensma (Novartis) and risdiplam (Roche). The most advanced drug in development is Zolgensma (Novartis), which should be approved in May 2019 for type 1 SMA and is in clinical trials for type 2. The advantage of Zolgensma is that it is a gene therapy given only once with a potential to cure the disease. But it is probably for SMA type 1 mainly (very young babies). The second drug is risdiplam (from Roche/Pfizer) which is in phase II/III in all three types of SMA. The first clinical data has shown efficacy in type 1 but the drug will probably be used more in advanced patients (older type 1 and type 2 and 3) as it can be given orally with a systemic effect.

A few changes implemented to the two drugs' sales models have a positive impact on FVs for both Novartis (up CHF 1 to CHF 1) and Roche (up CHF 4 to CHF 3.29). We have BUY ratings on both.

Jean-Jacques Le Fur, PharmD | 33(0) 70.36.57.45 | jjlefur@bryangarnier.com



9th May 2019

NOVARTIS

Healthcare
Pharmaceuticals

BUY

Fair Value CHF91(+9%)
Share price CHF83.52
EPS 3Y Cagr 6.6%

Zolgensma stands up strongly in early forms of SMA

Zolgensma could be the best drug in SMA type 1
After presenting new data on Zolgensma at the AAN congress, Novartis hosted a conference call yesterday to detail the new results for SPRINT (presymptomatic patients), STRIVE (SMA type 1) and STRONG (SMA type 2) clinical trials. Regarding SPRINT and STRIVE, it is now clearer that Zolgensma is answering the key issue in this disease i.e. the speed of effect since the motor neurons are destroyed very quickly with this disease (PS1 test in six months). The updated data from STRIVE shows a continuous increase in the number of babies/children gaining motor milestones (sitting without support has increased from 13.6% in Sept. 2018 to 50% in March 2019). Regarding pre-symptomatic patients, the first results presented appear not so different from those of Spinraza (NURTURE study) regarding the ability to sit without support and CHOP-INTEND score improvement. The main advantage of Zolgensma for these patients is that it is one single iv injection compared to regular intrathecal injections for Spinraza and Novartis is testing the iv formulation in older patients (so far it was supposed to work only in babies of no more than 8.5kg).

In SMA type 2 Zolgensma's efficacy is not so different from Spinraza
Beyond the absolute data for Zolgensma, it is interesting to compare them to those obtained with Spinraza (Biogen) in the CHERISH trial in SMA type 2. This comparison is particularly interesting since the two drugs are given via the intrathecal route to these patients (Zolgensma is given through iv route in SMA type 1). However, it is fair to recognise that the patient populations are slightly different between the two studies with an average age at enrolment of 17 months in the STRONG trial and 3 years at baseline in CHERISH. Regarding the HSMSE score (common in the two studies) the results are not so different with an increase of 4 points at 15 months for Spinraza and 4.2 points for Zolgensma (5-12 months post-treatment). However, Zolgensma has a quicker onset of action with 50% of patients older than 24 months having 3-points improvement at 1 month whereas it took 6 to 9 months for Spinraza to reach these 3 points improvement.
Turning to side effects, Spinraza appears safe with no difference with placebo when 2 patients (out of 30) had transaminase elevation with Zolgensma (a side effect to follow in the future). Like in SMA type 1 Zolgensma could benefit from its speed of action and its single injection.

We stick to our forecasts, including PS of USD3.3bn
Based on the data that has been collected so far and the comments made yesterday, we are reaffirming our forecasts for Zolgensma and do expect the drug to ramp-up fairly quickly to reach USD3.3bn at peak in 2022. This is based on price assumptions of USD2.5m in the US and USD1.75m in ROW, to be adjusted once the drug is approved. Lastly, we would note about the idea of combining Zolgensma with an oral splicing modifier like risdiplam, Novartis answered that there was no data and no rationale to support a claim of superiority vs monotherapy for the time being.

See [here](#) to access our detailed research report on SMA.

Eric Le Berrigaud
33(0) 1 56 68 75 33
eleberrigaud@bryangarnier.com
Click here to download

Market Data	
Bloomberg / Reuters	NOV YEL20N XX
Market Cap.	CHF11.62bn
E.V.	CHF214.96bn
Free Float	100%
Avg. Daily volume (sh)	4,845
12m High / Low	CHF84.9 / CHF84
12d Perf.	-0.45

	12/18	12/19a	12/20a	12/21a
Sales	51,900	46,478	48,489	50,328
% Change	-10.45	4.9%	3.3%	
EBITDA	8,199	16,200	17,230	17,569
% Change	97.45	6.4%	2.0%	
EBT	8,199	16,200	11,230	12,089
% Change	97.45	16.1%	7.3%	
Net Income	12,641	8,508	9,544	10,372
% Change	-32.3%	11.5%	8.7%	
ROE	0.17	0.11	0.12	0.12

	12/18	12/19a	12/20a	12/21a
EV/Sales	4.1x	4.5x	4.1x	3.9x
EV/EBITDA	25.7x	12.8x	11.7x	11.0x
EV/EBT	25.7x	20.4x	17.9x	16.1x
EPS	4.71	5.02	5.37	5.70
% Change	4.7%	6.9%	6.1%	
P/E	17.4x	16.3x	13.3x	14.4x
Div Yield	3.5%	3.2%	3.3%	3.3%

Next Catalyst: May 2019 - PDUA date Zolgensma

Last rating Change:
2018-7-2, *If Alcon is worth USD2.23bn, then our FV is CHF2.*

Last FV Change:
2019-4-10, *New temporary FV set at CHF90 per Novartis share (see Alcon report).*

Last Reports:
2019-4-23, *High-level confidence in sustainable margin growth*

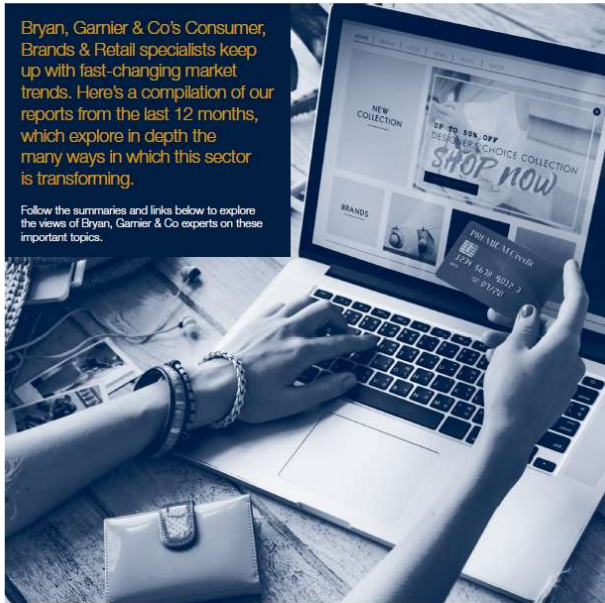
UNE PRODUCTION SECTORIELLE RICHE ET POINTUE (2/5)

CONSUMER INSIGHTS

CATCH UP WITH THE FAST-EVOLVING WORLDS OF CONSUMER, BRANDS AND RETAIL

Bryan, Garnier & Co's Consumer, Brands & Retail specialists keep up with fast-changing market trends. Here's a compilation of our reports from the last 12 months, which explore in depth the many ways in which this sector is transforming.

Follow the summaries and links below to explore the views of Bryan, Garnier & Co experts on these important topics.



LONDON
Bryan, Garnier & Co Ltd
Beaufort House, 15 St. Botolph St,
London, EC3A 7BB, UK
+44 (0) 207 332 2500

PARIS
Bryan, Garnier & Co
26 Avenue des Champs Elysees,
75008 Paris, France
+33 (0) 1 56 68 75 20

MUNICH
Bryan, Garnier & Co GmbH
Widermayerstrasse 29,
80538 Munich, Germany
+49 89 242 262 11

NEW YORK
Bryan Garnier Securities LLC
Lexington Avenue, New York,
NY 10022, US
+1 (0) 212 337 7000

CONSUMER INSIGHTS

CATCH UP WITH THE FAST-EVOLVING WORLDS OF CONSUMER, BRANDS AND RETAIL

NEW WAYS OF DOING RETAIL



SHOP-IN-SHOPS: THE WINNING NEW RETAIL CONCEPT

The concept of 'everything under the same roof' is being questioned for large retail formats such as hypermarkets. While many predict the death of the hypermarket, a new retail concept is promising to revitalize it: shop-in-shops. In this report, we discuss how this could become the opportunity for hypermarkets to improve their potential appeal by becoming hubs of excellence. EN



WHEN RETAILERS ENGAGE THE NEW 'CONNECTED CUSTOMER'

Millennials are set to outnumber baby boomers in 2019. This group is already changing retail patterns and forcing legacy retailers and brands to rapidly adapt to the new, omnichannel shopping experience they want. Digital transformation holds out significant growth opportunities. But challenges still exist: changing company cultures and legacy systems is complex, and takes time and money. EN



THE FUTURE OF RETAIL IS NOW

Amazon lit a fire underneath the retail industry. But even this giant and other Chinese digital-first retailers have realized that success in retail depends on the coexistence of the online and physical worlds. All retail brands – established and online – are recognizing the potential for 'experiential' physical stores to drive loyalty and sales. As traditional retailers rush to keep up with the revolution started by Amazon, they are sparking a wave of M&A activity that may see many retailers transform themselves, in effect, into technology companies. EN



THE BOOM OF TECH GIANTS' SMART HOME SPEAKERS IS OPENING A NEW E-COMMERCE CHANNEL

While mobile traffic is rapidly gaining traction across several countries, and dethroning desktop in both searches and online purchases, attention is already turning to voice search and conversational commerce. Taking part in the development of voice search is becoming a key issue for tech companies. EN



TECH AND FASHION: RETAILERS MUST BALANCE DESIRE AND DEMAND

In view of stiff competition from online platforms, which are above all tech companies, legacy retailers/brands are speeding up digital and IT investments to accelerate their digital transformation. However, Swedish fintech company Klarna, which has just signed a strategic partnership with H&M, has underscored the risk for fashion retailers of spreading their digital investments too widely, particularly in technologies that may not bring value-added to consumers, or drive incremental sales in physical stores. Retailers need to balance their own desires with what consumers are actually asking for. As usual, the customer is always right. EN



PARIS RETAIL WEEK: PHYGITAL ON THE DAILY MENU!

This update summarizes our five takeaways from Paris Retail Week (10-12th September). The event brought together 800 start-ups, tech companies, brands and retailers in the offline and online retailing industry to share their experiences on how they are adapting to the 'phygital' megatrend. EN

bryangarnier.com

CONSUMER INSIGHTS

CATCH UP WITH THE FAST-EVOLVING WORLDS OF CONSUMER, BRANDS AND RETAIL

FOOD & HPC



THE DEFAULT OPTION WINS

Our cautious stance on the sector is definitively reiterated following the Q1 sales release. In this environment, it is particularly important to be very selective in our recommendations. We consider Danone the most capable of outperforming peers thanks to its higher 2020 growth potential and cheaper valuation. EN



GLOWING DESPITE THE CHALLENGES

Despite a relatively competitive backdrop, the global cosmetics market is delivering robust growth (CAGR of 3.8% on the last 10 years) with acceleration expected in 2017 and in 2018 vs. 2016. The drivers are numerous, and e-commerce presents both challenge and opportunity in our view. EN



AFTER THE BIG BANG

Since the beginning of 2017, the food industry has been through huge change. The failed Kraft takeover of Unilever was followed by the entry of activist funds into Nestlé's and Danone's capital. We note that while Danone and Unilever promptly reacted to outside pressure, Nestlé's reaction was muted. We confirm our Buy recommendation on Danone. EN



THE RETURN OF PRICE INFLATION

The Q3 2018 sales release has indicated an improvement of the pricing environment. Danone, Nestlé and Unilever posted an average pricing of 1.3% over the quarter vs 0.7% in H1. This improvement is the result of several cyclical factors, including higher US distribution expenses. But structural issues remain and should continue to weigh on the companies' pricing power: 1/ industry fragmentation with local players taking market share; and 2/ changes in the distribution network, with the rise of e-commerce and the concentration of retailers and purchasing agencies in Europe. EN

CANNABIS



INFINITE EUPHORIA

There is a clear belief that cannabis will disrupt different sectors, with alcohol (beer and spirits) the most obvious. Most producers are not ready in terms of production and branding for the Canadian recreational cannabis market. EN

GAME CHANGER

The legalization of cannabis worldwide is creating a fast-expanding industry. Not only is there already a sizeable black market to take share from, but legalization itself seems to be creating its own momentum. Helped by Canada's leading role in legalizing cannabis and the drug's continued illegality in the US, Canadian companies including Canopy Growth, Aurora Cannabis and Aphria are taking a lead in the global cannabis market. EN

bryangarnier.com

UNE PRODUCTION SECTORIELLE RICHE ET POINTUE (3/5)

CONSUMER INSIGHTS

CATCH UP WITH THE FAST-EVOLVING WORLDS OF CONSUMER, BRANDS AND RETAIL

LUXURY



SLOWDOWN LIKELY BUT NO BREAK IN THE TREND

If H1 2018 was another great period for luxury goods (with both strong top line growth and margin improvement), we expect a gradual slowdown in the near term (H2 2018 and 2019) given challenging comparison bases and uncertainty in Greater China. Nevertheless, we remain confident for the long-term positive momentum of the luxury goods sector. We still favor LVMH and Hermès in this context. **EN**



BACK TO THE FUTURE!

Beyond the slight slowdown expected in 2018 (mainly in H2) and in 2019, the luxury goods industry should remain dynamic in coming years, in particular benefiting from the ramp-up in digitalization and e-commerce as a source of additional growth. At a time when no single model seems to be emerging, we bet on brands taking greater internal control of e-commerce over the medium term. **EN FR**



2018 SHOULD BE ANOTHER DYNAMIC YEAR FOR LUXURY!

The luxury goods industry is in better shape than we thought. A recovery that began in Q3 2016 and continued with 8% growth in 2017 looks set to continue in 2018. We therefore forecast sales growth of 8% for 2018 and have raised our earnings estimates by 4% on average for 2018-2020. In addition, we have upgraded LVMH from Neutral to Buy. **EN**

BEVERAGES



TAPPING FOR GROWTH

Western Europe is an important market for Heineken, Carlsberg and Royal Unibrew. Although it is often regarded as a mature beer market with little prospect for growth, there are definitely pockets of opportunity. The 420m prosperous Western Europeans consume 200m hectolitres of beer p.a. and their growth in disposable income brings volume growth in Southern Europe (where per capita consumption is still modest) and premiumization (craft, specialties, premium line extensions) across the region. And a growing focus on health is stimulating the no-and-low-alcohol segment. **EN**



A GINNAISSANCE UNDER WAY

Seen as somewhat old-fashioned just a few years ago, gin is now a star category in Europe. According to Statista, gin sales are expected to grow annually by 4.8% on average over the 2018-2021 period in the region. The top two markets remain Spain and the UK but growth is outstanding in other countries such as Germany, France and Italy. **EN**

Bryan, Garnier & Co is a European, full service growth-focused independent investment banking partnership founded in 1996. The firm provides equity research, sales and trading, private and public capital raising as well as M&A services to growth companies and their investors. It focuses on key growth sectors of the economy including Technology, Healthcare, Consumer and Business Services. Bryan, Garnier & Co is a fully registered broker-dealer authorized and regulated by the FCA in Europe and the FINRA in the U.S. Bryan, Garnier & Co is headquartered in London, with additional offices in Paris, Munich and New York. The firm is a member of the London Stock Exchange and Euronext.

bryangarnier.com

CONSUMER INSIGHTS

CATCH UP WITH THE FAST-EVOLVING WORLDS OF CONSUMER, BRANDS AND RETAIL

Consumer Team

INVESTMENT BANKING

LONDON

Charles Tellier
Managing Director,
Consumer, Brands & Retail
ctellier@bryangarnier.com

PARIS

Jean Caillaud
Executive Advisor,
Consumer, Brands & Retail
joaillau@bryangarnier.com



Greg Rivenu
Managing Partner
grivenu@bryangarnier.com

MUNICH

Falk Müller-Voerse
Partner
fmuellevoerse@bryangarnier.com



Lars Dürschlag
Managing Director
lduerschlag@bryangarnier.com

EQUITY CAPITAL MARKETS

Pierre Kiscoll-Wahl
Managing Director
pkiscollwahl@bryangarnier.com

EQUITY RESEARCH ANALYST TEAM

Clement Genicot
Retail & E-commerce
cgenicot@bryangarnier.com



Nikolaas Faes
Beverages & Cannabis
nfaes@bryangarnier.com



Loic Morvan
Luxury & Cosmetics
lmorvan@bryangarnier.com

Cedric Rossi
Consumer Goods
& E-commerce
crossi@bryangarnier.com



Virgine Roumage
Food & Beverages
vroumage@bryangarnier.com

EQUITY DISTRIBUTION

Nicolas-Xavier de Montaignut
Partner,
Head of Distribution
nxmontaignut@bryangarnier.com



Nicolas d'Halluin
Partner,
Head of US Distribution
ndhalluin@bryangarnier.com

bryangarnier.com

UNE PRODUCTION SECTORIELLE RICHE ET POINTUE (4/5)

TECHNOLOGY INSIGHTS

EXPLORE TODAY'S TECH TRENDS IN DEPTH

The tech industry is evolving faster than ever. As the 'cognitive' data-driven economy develops, suppliers must constantly innovate to meet the new needs of corporate customers who are in the midst of profound digital transformation.

In 2018, we took some deep dives into the tech industry to explore these trends. Our specialists looked at the transforming IT services and software industry, the booming payment market impacted by blockchain, the hype around 5G and IoT, the challenges faced by semiconductor players, and the promises of artificial intelligence and autonomous vehicles.

Follow the summaries and links below to explore the views of Bryan, Garnier & Co experts on these important topics.



IT SERVICES & SOFTWARE

ADOPTION OF A MULTI-DIMENSIONAL PROSPECTIVE BETA

Over the years, IT players have substantially reduced their earnings volatility. Maintenance of their installed bases and the emergence of the cloud have boosted recurring software sales, while for IT services companies, industrialization has reduced their dependence on cycles. In view of this, a more precise DCF valuation method seems necessary. For this reason, we have improved our current method by adopting multi-dimensional prospective betas.

EN FR



R&D CONSULTING

THE TRANSFORMING R&D INDUSTRY

Engineering and R&D services have grown and evolved significantly in recent years. The sector is following the same trajectory of globalization, industrialization and consolidation that we saw 10-15 years ago in IT services. Size, therefore, is becoming crucial for leading outsourced R&D players looking to increase their presence with major industrial firms. In this paper, we look at the trends driving this sector, explore how R&D expenditure is evolving, reveal how the market has developed into six distinct categories, and summarize recent acquisition activity.

EN

LONDON
Bryan, Garnier & Co Ltd
Beaufort House, 15 St. Botolph St,
London, EC3A 7BB, UK
+44 (0) 207 332 2500

PARIS
Bryan, Garnier & Co
26 Avenue des Champs Elysees,
75008 Paris, France
+33 (0) 1 56 68 75 20

MUNICH
Bryan, Garnier & Co GmbH
Wolframstrasse 29,
80338 Munich, Germany
+49 89 242 262 11

NEW YORK
Bryan Garnier Securities LLC
Lexington Avenue, New York,
NY 10022, US
+1 (212) 337 7000

TECHNOLOGY INSIGHTS

EXPLORE TODAY'S TECH TRENDS IN DEPTH



SEMI-CONDUCTORS
AND TELECOMS

5G: THE REALITY BEYOND THE HYPE

Everyone's talking about 5G. With deployment approaching fast, we address the major questions around this new technology. What is 5G, and will it be disruptive? Where are we at, and what can we expect in concrete terms for the coming years? In particular, we address the impact of 5G on the telecoms and semiconductor sectors by exploring the following questions: How should 5G impact operators' business models? Can expectations of value creation compensate for investment fears? Is 5G a growth driver for some semiconductor players?

EN FR



SEMI-CONDUCTORS

AFTER THE LIFT-OFF, PREPARE FOR SOME TURBULENCE

We update the current landscape for our semiconductor coverage, a sector that saw strong growth in 2018. Major trends that are relevant to several applications should support long-term prospects. However, we believe investors should be prepared for more volatility and bumps from now on partly due to the trade war between the US and China.

EN

HEADING TO ANOTHER RECORD YEAR FOR EQUIPMENT MAKERS

This in-depth analysis looks at technology developments in the semiconductor industry and how they impact the players. We focus in particular on equipment producers, often in the chipmakers' shadow but pioneers in some innovative technologies. In our view, the current context of more complex innovation places some equipment producers in an unprecedented position to add value and reinforce pricing power.

EN FR



ARTIFICIAL
INTELLIGENCE AND
AUTONOMOUS DRIVING

AUTONOMOUS DRIVING – SECTOR ANALYSIS

The traditionally sedate automotive industry has been jolted to life in recent years by three seismic shifts that are occurring almost simultaneously: vehicle electrification, car sharing, and self-driving cars. These waves of change threaten, or promise, to transform every aspect of the automotive business. Value-creation is shifting away from the physical device towards software intelligence, the partner ecosystem and the delivery of data-driven services. The value lies not in the machine, but in what you can make it do and in how the service of making a journey is provided. In this white paper on autonomous driving/self-driving cars, we look at the key technologies that enable them, and how industry players are playing a role.

EN

CES 2018: ARTIFICIAL INTELLIGENCE TAKES CONTROL

CES 2018 was a record-breaker, especially for the auto and components sectors: Over 3,900 exhibitors showcased world-changing technologies. CES is now clearly seen by the auto industry as the best place to unveil and promote innovation as well as new products. Interestingly, the number of auto suppliers attending the fair was up significantly compared to 2017 while the number of carmakers remained stable. This confirms our view that the most high-tech suppliers will tend to gain further share in the entire vehicle value chain, to the detriment of their end customers (carmakers) who are losing market share in the value of the car. Most innovation comes from tech suppliers rather than automakers.

EN

UNE PRODUCTION SECTORIELLE RICHE ET POINTUE (5/5)



TECHNOLOGY INSIGHTS

EXPLORE TODAY'S TECH TRENDS IN DEPTH

3D SENSING AND THE POTENTIAL OF AUGMENTED REALITY

Despite the success of the popular game Pokémon Go, augmented reality (AR) – which makes it possible for virtual objects to interact with the real world – has made little progress on smartphones. The limiting factor is technology, specifically the problem of creating sensors that can build a 3D view of the world. However, Time-of-Flight technology, already used on smartphones to detect proximity, could be the breakthrough that enables AR to take off on smartphones and beyond.

EN

THE PROMISE OF BLOCKCHAIN (WHITE PAPER)

Blockchain is a unique and promising technology, with potential application in any field where groups of people have a common aim, yet do not know or trust each other. Today, we see it more as a way of facilitating existing systems. In this paper we explore and explain blockchain, looking first at how bitcoin works. We examine how "mining" is driving developments in the semiconductor industry as it creates a constantly rising demand for more processing power. Finally, we look at the many applications for blockchain technology beyond bitcoin.

EN

BLOCKCHAIN BUSINESS CASE FOR PAYMENTS: A UNIQUE AND PROMISING TECHNOLOGY (EQUITY RESEARCH NOTE)

This note expands on the white paper above to review some of the relevant players covered by Bryan, Garnier & Co.

EN FR

PSD2: MORE SERVICES AND FEWER BANKS

PSD2 is the second phase of the Payment Services Directive, which was implemented by the EU in 2007. Its main objectives are to participate in a more integrated, efficient and harmonized European payments market, to enrich services and encourage competition, and to strengthen payment security and consumer protection. Finally, PSD2 recognizes and regulates third-party PSPs that are authorized to access accounts, aggregate data and initiate account-to-account payments. What new jobs will be created? How will PSD2 transform payments for consumers and merchants? Will it make it possible to reinvent banking services (open banking)? How will banks and payment specialists be affected? How do they prepare for this? Who will be the big winners?

EN FR

PSPS TO PLAY AND AVOID IN THE EUROPEAN PAYMENTS SECTOR

As the payment sector is attracting attention, we share our views on consolidation opportunities and reaffirm our preferences on different stocks.

EN FR

Bryan, Garnier & Co is a European, full service growth-focused independent investment banking partnership founded in 1996. The firm provides equity research, sales and trading, private and public capital raising as well as M&A services to growth companies and their investors. It focuses on key growth sectors of the economy including Technology, Healthcare, Consumer and Business Services. Bryan, Garnier & Co is a fully registered broker dealer authorized and regulated by the FCA in Europe and the FINRA in the U.S. Bryan, Garnier & Co is headquartered in London, with additional offices in Paris, Munich and New York. The firm is a member of the London Stock Exchange and Euronext.

bryangarnier.com



TECHNOLOGY INSIGHTS

EXPLORE TODAY'S TECH TRENDS IN DEPTH

Technology Team

INVESTMENT BANKING

PARIS

Greg Revenu
Managing Partner
grevenu@bryangarnier.com

Olivier Beaudouin
Partner, Technology & Smart Industries
obeaudouin@bryangarnier.com

Guillaume Nathan
Partner, Digital Media & Business Services
gnathan@bryangarnier.com

Thibaut De Smedt
Partner, Application Software & IT Services
tdesmedt@bryangarnier.com

Philippe Patricot
Managing Director, Technology
ppatricot@bryangarnier.com

MUNICH

Falk Müller-Veerse
Partner
fmullerveerse@bryangarnier.com

Lars Dürschlag
Managing Director
lduerschlag@bryangarnier.com

EQUITY RESEARCH ANALYST TEAM

Richard-Maxime Beaudoux
Video Games, Payment & Security
rmbaudoux@bryangarnier.com

Thomas Coudry
Telecoms & Media
tcoudry@bryangarnier.com

Gregory Ramirez
Software & IT Services
gramirez@bryangarnier.com

Frédéric Yoboué
Semiconductors
fyoboue@bryangarnier.com

EQUITY CAPITAL MARKETS

Pierre Kiecolt-Wahl
Managing Director
pkiecoltwahl@bryangarnier.com

EQUITY DISTRIBUTION


Nicolas-Xavier de Montaigne
Partner, Head of Distribution
ndemontaigne@bryangarnier.com


Nicolas d'Halluin
Partner, Head of US Distribution
ndhalluin@bryangarnier.com

bryangarnier.com

NOS GRANDS RENDEZ-VOUS ANNUELS PROPRIÉTAIRES (1/4)



In Partnership With

 BRYAN, GARNIER & Co

In Partnership With

 institutCurie

SAVE THE DATE

ANNUAL ONCOLOGY DAY

Monday 17th June 2019

Bryan, Garnier & Co | 26 avenue des Champs Elysées | 75008 | Paris

For more information: write to your Bryan, Garnier & Co contact
 or email events@bryangarnier.com



PROGRAMME



BRYAN, GARNIER & Co IN PARTNERSHIP WITH INSTITUT CURIE

ANNUAL ONCOLOGY DAY

Monday 17th June 2019

Venue: Bryan, Garnier & Co | 26 avenue des Champs Elysées | 75008

08:30 - 09:00	Registration & Welcome Coffee	
09:00 - 10:00	Feedback from ASCO 2019 by Professor Jean-François Morère Head of Cancer Department at CHU Paul Brousse, Villejuif	
10:00 - 10:30	Focus by Professor Nicolas Girard from Institut Curie about advances in lung cancer	
10:30 - 11:00	Q&A Session	
11:00 - 11:20	Break	
11:20 - 12:00	Plenary Session ROCHE Stefan Frings Head of Medical Affairs	Group Meetings Pick the company
12:05 - 12:45	Group Meetings Pick the company	
12:45 - 14:00	Lunch	
14:00 - 14:40	Plenary Session ASTRAZENECA Andrew Mortlock VP Oncology Projects and Alliances	Group Meetings Pick the company
14:45 - 15:30	Plenary Session IPSEN Alexandre Lebeaut EVP R&D, Chief Scientific Officer	Group Meetings Pick the company

BUS: 83 & 93
METRO: Franklin Roosevelt (Lignes 1 & 9)

PARKING: 45/47 avenue Franklin D. Roosevelt
 Indigo Rond-Point des Champs-Elysées

[Visit our Website & Register](#)

NOS GRANDS RENDEZ-VOUS ANNUELS PROPRIÉTAIRES (2/4)



SAVE THE DATE

Annual Consumer, Brands & Retail Conference

Monday 23 & Tuesday 24 September 2019

Etoile Business Center | 75008 | Paris

For more information: write to your Bryan, Garnier & Co
contact or email, events@bryangarnier.com



Annual Consumer, Brands & Retail Conference

Monday 23 & Tuesday 24 September 2019

Etoile Business Center | 75008 | Paris

Roundtables:
Second-hand Market | Naturalness

Participants will include
CARREFOUR | CASINO | CÉCONOMY | DANONE | ESSILORLUXOTICCA
FNAC DARTY | GROUPE SEB | HENKEL | INTERPARFUMS | KERING | LVMH
MAISONS DU MONDE MBWS | NESTLE | PERNOD RICARB | ROYAL UNIBREW...

For more information: write to your Bryan, Garnier & Co
contact or email: events@bryangarnier.com

NOS GRANDS RENDEZ-VOUS ANNUELS PROPRIÉTAIRES (3/4)



PARTICIPATE IN BRYAN, GARNIER & CO

BRYAN, GARNIER & CO

SAVE THE DATE

7th Annual Healthcare Conference

Wednesday 20 & Thursday 21 November 2019

Etoile Business Center | 75008 | Paris

For more information: write to your Bryan, Garnier & Co contact or email, events@bryangarnier.com

ANNUAL HEALTHCARE CONFERENCE

22 & 23 November 2018
Etoile Business Center, Paris

22 NOVEMBER	23 NOVEMBER
BASILEA Donato Spota • Chief Financial Officer Adesh Kaul • Chief Corporate Development Officer	ASTRAZENECA Pascal Soriot • Chief Executive Officer
CELYAD Speaker to be confirmed	BONE THERAPEUTICS Thomas Lienard • Chief Executive Officer Jean-Luc Vandebroek • Chief Financial Officer
GENMAB Rachel Curtis Gravesen • Senior Vice President, Investor Relations and Communications	GENEURO Jesus Martin-Garcia • Chief Executive Officer Miguel Payro • Chief Financial Officer
INNATE Speaker to be confirmed	IDORSIA Jean-Paul Clozel • Chief Executive Officer André Muller • Chief Financial Officer
KORIAN Nadine Coulm • VP Investor Relations & Financing	TRANSGENE Philippe Archinard • Chief Executive Officer
MORPHOSYS Speaker to be confirmed	
NICOX Michele Garufi • Chief Executive Officer	
SANOFI Speaker to be confirmed	
ZEALAND Britt Meelby Jensen • President & Chief Executive Officer Mats Blom • Chief Financial Officer	

and more to come

Respond to your contact at Bryan Garnier or send an email to marketing@bryangarnier.com

NOS GRANDS RENDEZ-VOUS ANNUELS PROPRIÉTAIRES (4/4)




BRYAN, GARNIER & CO


SAVE THE DATE


4TH ANNUAL TECHNOLOGY CONFERENCE

Thursday 14 & Friday 15 March 2019

Etoile Business Center | 75008 | Paris

For more information: write to your Bryan, Garnier & Co contact or email,
events@bryangarnier.com




BRYAN, GARNIER & CO

4th ANNUAL TECHNOLOGY CONFERENCE

Thursday 14th & Friday 15th March 2019

Etoile Business Center | Paris 8

- 4 Roundtables with key industry experts :
 - Smart cities: buzz or reality?
 - Key trends in European cybersecurity
 - Healthcare: how new technologies are disrupting the patient journey
 - How the cognitive digital economy is driving new infrastructure needs
- Corporate Sessions with Representatives of the following companies:
CAPGEMINI | ATOS | AXWAY | INDRA | MATERIALISE | SOPRA STERIA | SWORD
SOFTWARE AG | ASM International | BESI | INFINEON | SOITEC | STMICROELECTRONICS
DIALOG | ORANGE | BOUYGUES | M6 | SAFECHARGE | WORLDLINE | EDENRED



This document is based on information available to the public and other sources deemed reliable.

No representation or warranty, express or implied, is or will be made in relation to, and no responsibility or reliability is or will be accepted by Bryan Garnier & Company or any of its officers, employees or advisers as to the accuracy or completeness of this document or any other written or verbal information available to the recipient or its advisers.

While all reasonable care has been taken to ensure that the facts stated are accurate and the opinions given are fair and reasonable, neither we nor any of our affiliated companies nor any of our, or their directors, representatives or employees, accepts responsibility or liability for any loss or expense arising directly or indirectly from the use of this document or its or its contents. This document is not and should not be construed as an offer, or a solicitation of any offer, to buy or sell securities.

Bryan, Garnier & Co is authorised and regulated by the Financial Conduct Authority (FCA) in the United Kingdom.