

Executive Summary

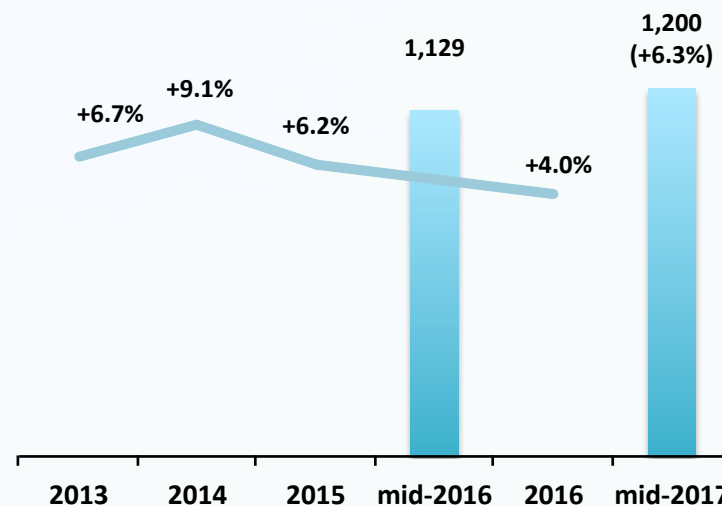
Liver & bile remedies

- Heavily reliant on doctor recommendation and consumer promotion, liver & bile remedies are generally positioned for improving the detoxification function of the liver and restoring its cellular structure
- The category generates the vast majority of sales in Europe and E&SE Asia
- A wave of activity drove category development; combating liver fatigue was a key focus in Japan and Korea, while increasing presence of MNCs contributed to a sizeable upturn in China
- Also driving growth in Asia-Pacific is the strong drinking culture, with several launches in markets such as Japan, China and India
- Supplements positioned as hangover treatments and detox products are increasing their presence

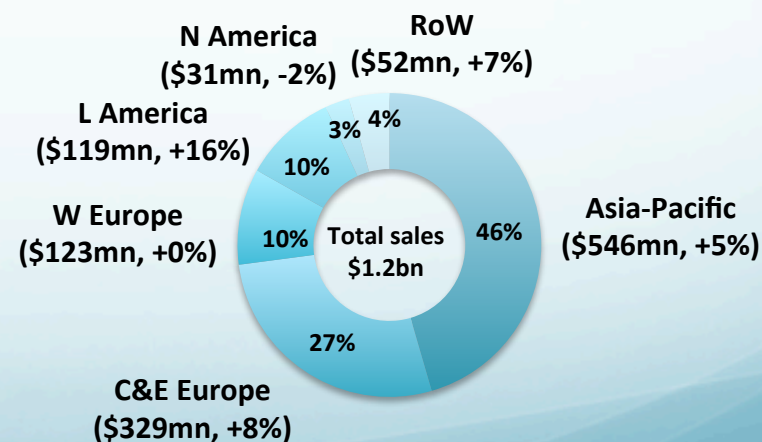
Liver & bile remedies trends in key markets

- **China** is the largest global market for liver & bile remedies, boosted by the introduction of international brand Essentiale in 2014
- A key development in 2016 was China Resources 999 gaining the exclusive rights (from Sanofi) to distribute and market the brand (capsule format only) in China for ten years
- Modern lifestyles have created demand for liver health products, marked by an increase in fatty liver disease in office workers; Essentiale's strong positioning for liver repair is a key factor in its success

Global liver & bile remedies sales mid-2016 & mid-2017 (MSP, \$mn)

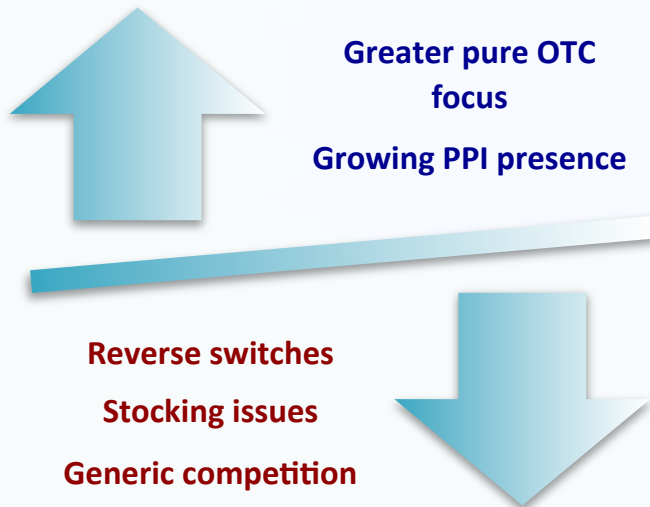


Global liver & bile remedies sales by major region mid-2017 (MSP, \$mn)



France – Overview

Growth drivers & negative factors



France leading upper GLs marketers mid-2017 (MSP, \$mn)

	Marketer	mid-2017 \$mn	mid-17 / mid-16	CAGR 16/12	% share
1	RB	20.8	-8%	-8%	13
2	Sanofi	13.4	+1%	-2%	8
3	Mylan	12.5	-42%	+1%	8
4	Bayer	11.3	-5%	-3%	7
5	Pierre Fabre	10.9	-12%	+1%	7
6	Bristol-Myers Squibb	10.8	+3%	+1%	7
7	AlfaSigma	8.0	-8%	-2%	5
8	Grimberg	6.9	-8%	-1%	4
9	Mayoly-Spindler	4.3	-50%	-6%	3
10	Cooper	3.1	+1%	+2%	2
	Others	60.2	+6%	-1%	37

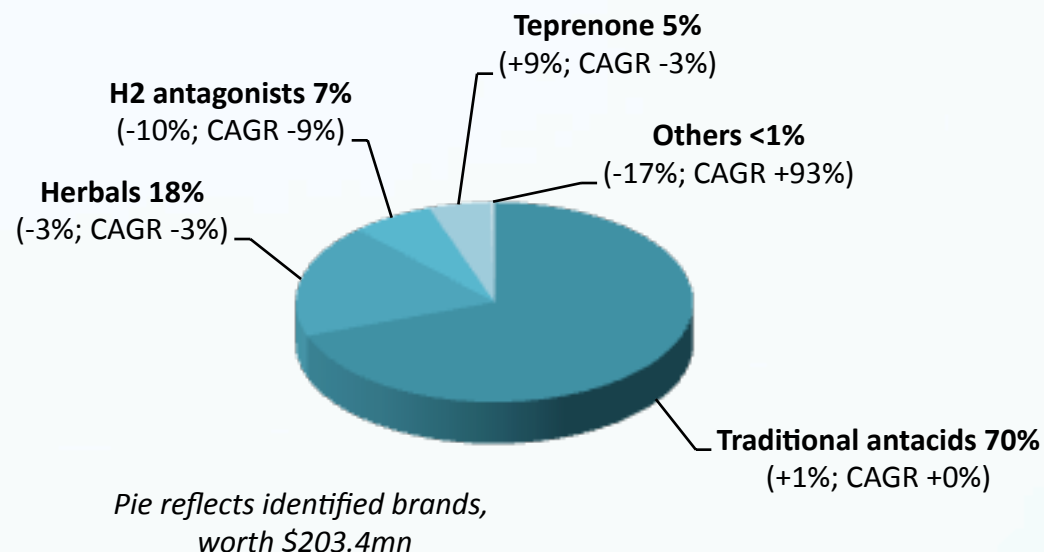
- Traditional antacids are increasing the focus on sodium alginate (to fight acid reflux)
- The **antiflatulents** topline has failed to recover from reimbursement cuts for leading brand Météoxane in 2010
- Outside of top two brands (semi-ethicals Météoxane and Carbosymag), the category comprises a notable pure OTC segment, with a number of brands here added to the self-selection list in recent years (although this has not yet provided much of a boost to sales)
- Semi-ethicals and pure OTCs also face growing competition from launches of medical devices, homeopathics and supplements (with paediatric presentations a key launch area in 2016)

Japan – Antacids

- **Cabagin** grew, with 2014 launch Cabagin Kowa Alpha helping drive sales; line extension, which adds herbal ingredient perilla to the core methylmethionine sulfonium chloride formula to repair gastric mucosa, has become the top-selling presentation
- Alpha presentation was extended in October 2016 with a granule format (*see right*), promoted via TV ads featuring office workers focusing on its convenience and ease-of-use (*see below*)



Japan antacids sales by segment 2016
(MSP, \$mn)



- Tablet presentation was extended with a convenience-sized 18-count SKU in 2016, smaller and lower-priced than existing 100, 200 and 300-count packs
- Online promotion includes a partnership with restaurant directory Tabelog, positioning the brand as a suitable treatment for gastrointestinal problems caused by overindulgence while eating out
- **Taisho's** range of kampo-based digestive remedies are promoted to party-goers as suitable for symptoms of overindulgence; brand is intended to be taken before and between meals rather than after eating

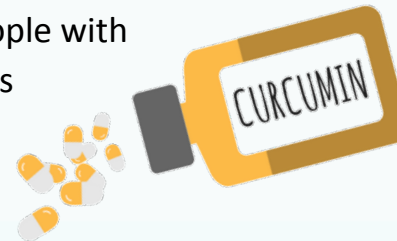
Scientific studies

Liver health

- Non-alcoholic fatty liver disease (NAFLD) is a term used to describe disorders of the liver caused by excess fat deposits (*see box right*); NAFLD is linked with overweight and obesity
- Obesity has tripled since 1975 (according to the World Health Organisation) and in 2016 more than 1.9bn adults were overweight
- Liver health is most often brought to mind when drinking alcohol, yet NAFLD is the most common liver problem in the Western world; obesity is also known to worsen the severity of alcohol-induced liver disease

Curcumin

- A 2017 study published in *Drug Research* found that phytosomal curcumin supplementation may reduce biomarkers for liver damage in people with NAFLD; the multi-institutional team allocated 102 NAFLD patients to curcumin 1,000mg per day or placebo for eight weeks
- The curcumin group showed reductions in both waist size and BMI, while an improvement in liver ultrasonographic findings was recorded in 75% of the group vs placebo (4.7%); additionally, liver damage markers were reduced in the curcumin group and elevated in the placebo group
- Research in 2016 (published in *Phytotherapy Research*) also supported the use of curcumin to treat NAFLD; patients with ultrasonographic evidence of NAFLD were assigned a curcumin formulation (equivalent to curcumin 70mg) or placebo every day for eight weeks
- Results similarly found the curcumin group was associated with a reduction in liver fat content, BMI, total serum cholesterol and liver damage biomarkers



Non-Alcoholic Fatty Liver Disease

NAFLD is estimated to affect 25-30% of the general population. The term is used to describe a range of conditions caused by fat build-up in the liver. It is generally seen in overweight individuals, which refers to around 40% of the adult population

♦ = Fat deposits

