Merck KGaA
Germany, Pharmaceuticals

A- STABLE

Corporate profile

Merck KGaA is a slightly diversified group that was founded in 1668 with the opening of a Merck pharmacy in Darmstadt, Germany, where the group is still based. The Merck family holds 70% of the voting rights with the remainder in public ownership. After several acquisitions and divestments, the group now consists of three divisions: Healthcare, Life Science and Performance Materials (specialty chemicals). In 2015, Merck acquired the US-based life science company Sigma Aldrich for a price of USD 17bn, becoming a consolidator in that industry. In pharmaceuticals, it is a specialised, medium-sized producer of drugs, relying on two blockbuster products, Erbitux and Rebif, but has developed a new focus on immuno-oncological products, mainly represented by its antibody avelumab, already marketed as Bavencio. At the end of 2014, US-based big pharma company Pfizer acquired partial ownership of the molecule as well as US distribution rights for USD 850m. In 2019, Merck bought US electronic materials producer Versum Materials Inc for about EUR 6bn, to strengthen its performance materials division.

Key metrics

			Scope estimates	
Scope credit ratios	**2018**	**2019**	**2020F**	**2021F**
SaD/EBITDA (x)	2.1	3.0	2.6	2.2
Scope-adjusted FFO/SaD (%)	29	23	26	31
FOCF/SaD (%)	17	17	13	18

Rating rationale

Scope Ratings affirms its A-/Stable issuer rating to Merck KGaA. The short-term rating is S-1.

The rating affirmation reflects our unchanged view of Merck's credit-supportive business risk profile, which consists of the mostly stable and cash-generative business models of its three critically sized divisions. In addition, we continue to see the group's diversified structure as reflecting the owning family's commitment to achieving balanced cyclicality exposure.

Merck's Healthcare division is still transitioning to a new growth phase. It therefore depends, to some extent, on the continued stability of its mature product portfolio until its promising pipeline and newly approved drugs are performing fully. Management continues to expect an additional contribution of EUR 2bn from newly approved and to-be-approved drugs' revenues in the period to 2022. So far, the recent sales generation of key drug Bavencio (anti-PD-L1), jointly developed and marketed with Pfizer Inc, has been rather modest. To date, the drug is approved for a number of indications with lower revenue potential (bladder cancer [second-line treatment], Merkel cell carcinoma, renal cell carcinoma). While approval for the potentially much more sizeable first-line treatment of bladder cancer was already received for the US in June 2020, European approval is still outstanding.

Avelumab is currently being developed in four Phase 2 and 3 projects. Sales of Merck's new multiple sclerosis drug Mavenclad have ramped up successfully, following US approval in early 2019. This was a major breakthrough, which opened up blockbuster potential for the drug.

Ratings & Outlook

Corporate ratings	A-/Stable
Short-term rating	S-1
Senior unsecured debt	A-
Subordinated debt	BBB

Analysts

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Related Methodologies

Corporate Rating Methodology, February 2020

European Pharmaceuticals, January 2020

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Bloomberg: SCOP

In a crowded multiple sclerosis product market, the drug is likely to generate more than EUR 500m in revenues in 2020. This is a real achievement, although sales generation was significantly held back by the coronavirus crisis in the second quarter of 2020. We believe there is additional blockbuster potential in Merck's pipeline for bintrafusp alfa (oncology, anti-PD-L1), which is currently in six Phase 2 developments.

The other Merck group divisions have developed differently in the last twelve months. While Life Science managed to perform very strongly after the integration of Sigma Aldrich (acquired in 2015), both in terms of sales growth and margin expansion, the Performance Materials division was held back by the ongoing decline in profitability caused by competitive pressure in the liquid displays sub-division. As there is no growth potential for this former Merck flagship anymore, it is being managed for cash generation after a significant restructuring in the past 18 months. Declining liquid displays profits have been effectively mitigated by the acquisition of Versum, a producer of electronic materials, which has been acquired and integrated successfully. This transaction was of high strategic importance for two reasons: i) it immediately and effectively balanced the lost liquid displays profits; and ii) it provided a new platform, which should allow Merck to benefit from future growth in the semiconductor solutions industries. We continue to assess Merck's business risk profile at A.

Our assessment of Merck's financial risk profile reflects our continued expectation that management will be both able and willing to reduce debt regularly in the coming years. This ability has been evidenced by the swift deleveraging following sizeable takeovers in the past (serono, Millipore, Sigma Aldrich). After Merck's acquisition of US-based Versum, a producer of electronics materials, especially for the semiconductor industry, management announced a focus on costs after 2019, including R&D as well as sales and marketing expenditures. As 2019 credit metrics were negatively affected by the acquisition debt for Versum (only one quarter of Versum cash flows was consolidated that year), metrics were not fully comparable. In 2020, we expect group credit metrics to have recovered somewhat compared to the year before. This is due to the full inclusion of Versum and an expected recovery in demand for individual drugs in the second half of the year, following a weaker first half as a result of Covid-19. Despite this, we expect key credit metrics to almost reach our ratio guidelines for the ratings: funds from operations (FFO)/Scope-adjusted debt (SaD) of about 30% and an adjusted EBITDA/SaD of about 2.5x by the end of the year. In addition, we expect the Healthcare division to deliver on its pipeline from 2021. Our base case scenario assuming a metrics recovery is also supported by management's strong ratings commitment and by the fact that larger acquisitions have been ruled out until the end of 2020. Further support is provided by the fact that Merck has prevailed in the US litigation against Biogen Idec, which saves more than EUR 300m in potential damage payments.

Outlook and rating-change drivers

The Stable Outlook reflects our expectations of SaD/EBITDA of 2.5x and FFO/SaD of 30%-35%, which are indicative for the current rating and Outlook and translate into a financial risk profile assessment in the BBB category.

A higher rating could be triggered by both an improved business risk assessment if the Healthcare division performs well in the future (connected to a faster ramp-up of Bavencio sales) and a sustained improvement in credit metrics beyond the levels detailed previously (SaD/EBITDA significantly below 2.5x on a sustained basis).

A negative rating action could be the result of a more aggressive financial policy – which we do not foresee – or a sustained negative departure from the ratio levels commensurate with the present ratings (SaD/EBITDA of above 2.5x and FFO/SaD of below 30%).

Rating drivers

Positive rating drivers	Negative rating drivers
• Diversified group structure with positive effects on internal risk balancing • World market leader in liquid crystals • Potential pharma blockbuster in development • Significant free cash flow generation • Conservative financial policy	• Healthcare division in transition • Margin pressure in liquid crystals

Rating-change drivers

Positive rating-change drivers	Negative rating-change drivers
• Business risk improvements, such as successful new drug approvals • Leverage below 2.5x on a sustained basis	• Leverage of above 2.5x and FFO/SaD of below 30% on a sustained basis

Financial overview

			Scope estimates	
Scope credit ratios	**2018**	**2019**	**2020F**	**2021F**
SaD/EBITDA (x)	2.1	3.0	2.6	2.2
Scope-adjusted FFO/SaD (%)	29	23	26	31
FOCF/SaD (%)	17	17	13	18
Scope-adjusted EBITDA in EUR m	**2018**	**2019**	**2020F**	**2021F**
EBITDA	3,538	4,064	4,470	4,950
Operating lease depreciation adjustment	117	-	-	-
Scope-adjusted EBITDA	3,655	4,064	4,470	4,950
Scope funds from operations in EUR m	**2018**	**2019**	**2020F**	**2021F**
EBITDA	3,538	4,064	4,470	4,950
less: (net) cash interest as per cash flow statement	-252	-370	-285	-260
less: cash tax paid as per cash flow statement	-965	-850	-1.000	-1.150
add: depreciation component operating leases	117	-	-	-
Other	173	0	0	0
Scope funds from operations	2,438	2,844	3,185	3,540
Scope-adjusted debt in EUR m	**2018**	**2019**	**2020F**	**2021F**
Reported gross financial debt	8,896	13,194	12,487	11,987
less: 50% of hybrid bonds	-745	-1.493	-1.494	-1.494
less: cash, cash equivalents	-2,194	-781	-754	-974
Cash not accessible	300	300	300	300
add: pension adjustment	1.001	1.206	1.151	1.151
add: operating lease obligations	497	0	0	0
Other	-89			
Scope-adjusted debt	7.666	12.351	11.590	10.871

Business risk profile

Risk balanced group structure

Based on its long-term commitment to diversified pharmaceuticals/chemicals exposure, Merck has built its group structure around three sizeable divisions holding, in part, significant market shares. The acquisition of US-based Sigma Aldrich for the group's Life Science division in 2015, positioned it among the top three producers of laboratory equipment and related products globally. The liquid crystals business (part of the Performance Materials division) continues to hold strong global market positions despite its recently impaired profitability. Rebalancing of the Performance Materials division was done via the Versum acquisition (semiconductor business). Merck's pharmaceutical subdivision is a medium-sized drug producer, which has only recently been able to gain approval for novel pipeline projects ending a period of years without innovation.

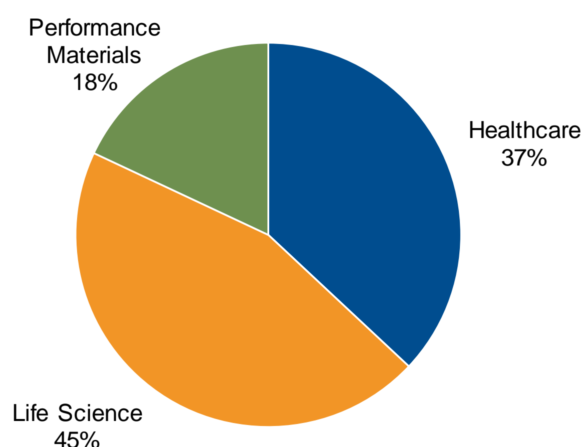
Solid and resilient business risk profile

We believe Merck's group structure could effectively protect group cash generation in the event of a recession or a pharmaceutical downturn caused by patent expiry. This is based on our view of both the life science and liquid crystals as well as semiconductor industries' comparatively low cyclicality and high cash flow generation. The pharmaceutical industry is generally less exposed to macroeconomic downturns. Cyclicality risk for the industry is of a more long-term nature, defined by product lifecycles and the pipeline replacement of patent-expired products.

In accordance with our corporate ratings methodology, we assess each division's business risk profile separately, taking the divisions' different characteristics into account. By applying weights related to the divisions' individual profit contribution to the group (see Figure 1), we have determined that Merck's group business risk profile falls within the A category.

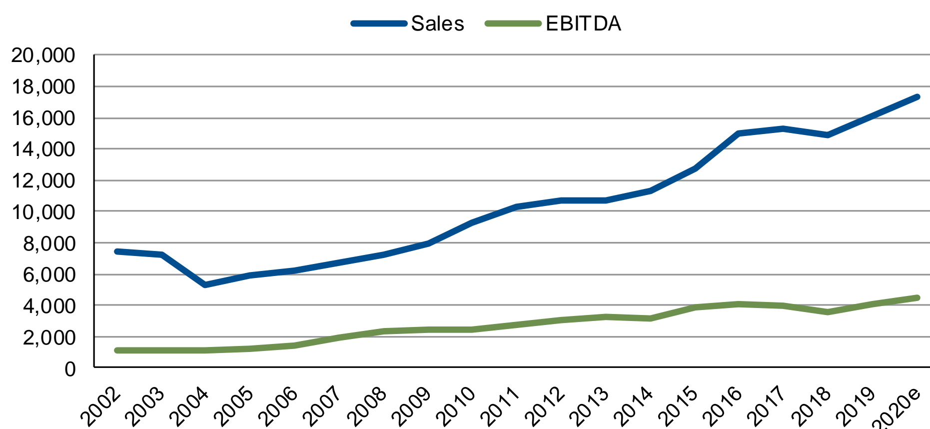
We view the mix of industries which Merck is exposed to as very credit supportive. All of the underlying industries are only very faintly exposed to macroeconomic downturns. Demand in the Life Science and Healthcare divisions is driven by ageing societies and unhealthy lifestyles, as well as innovation. The Performance Materials division generally supplies specialty products for a large number of industrial applications, making a sharply negative cyclical impact less likely for the overall division. The anticipated downturn in liquid crystals' performance has been efficiently addressed by management's strategy of focussing on the semiconductor segment via the acquisition of Versum in late 2019.

Figure 1: Group EBITDA breakdown by division



Source: Scope estimates

Figure 2: Positive long-term trends at Merck



We also believe that barriers to entry are high in pharmaceuticals (R&D, marketing expertise) and liquid crystals (technical concentration in the industry). While we consider that the group's other performance material activities (pigments and electronics) shift the divisional entry barrier risk slightly downwards, we view the life science industry, which deals with medical equipment, as well protected by medium-risk barriers to entry due to its focus on specialty products and increasing network requirements.

Merck's competitive position weighed down by Healthcare

Merck's pharmaceutical activities suffer from an aged and comparatively small product portfolio compared to big pharma peers. Its two mature blockbusters Erbitux (oncology) and Rebif (multiple sclerosis) are already past patent expiry in major markets but are still holding up sales extremely well. This is important during the division's present transitional phase until newly approved products can generate significant growth. Apart from the two flagship products, Merck's 'base business', consisting mostly of off-patent mature drugs like Glucophage (diabetes), Concor (hypertension) or Gonal-F (fertility), continues to be stable.

First indication approvals of Bavencio (avelumab), Merck's prospective anti-PDL-1 blockbuster, and Mavenclad, its oral multiple sclerosis treatment, are positive. At the same time, they have not yet changed our assessment of the group's competitive position in healthcare overall, as first sales generation continues to be comparatively low. The present coronavirus crisis has not helped in that respect. Mavenclad's second-quarter revenues, in particular, were heavily impacted by hospital access problems. To date, Bavencio is approved for a number of indications with lower revenue potential for Merck (bladder cancer [second-line treatment], Merkel cell carcinoma, renal cell carcinoma). While approval for the potentially much more sizeable first-line treatment of bladder cancer was already received for the US in June 2020, European approval is still outstanding. Management is still targeting a peak sales scenario of up to EUR 2bn for Bavencio, Mavenclad and Tepotinib together by the end of 2022. Bavencio, which generated revenues of EUR 66m in the first half of 2020, is currently being developed in four further Phase 2 and 3 projects.

Sales of Merck's new multiple sclerosis drug Mavenclad have ramped up successfully, following US approval in early 2019. This was a major breakthrough, which opened up blockbuster potential for the drug. In a crowded multiple sclerosis product market, the drug is likely to generate more than EUR 500m in revenues in 2020. This is a real achievement, although sales generation was significantly held back by the coronavirus crisis in the second quarter of 2020.

While healthcare margins are still mediocre in a pharma peer context, as Merck continues to invest heavily in R&D, good pipeline prospects (avelumab, bintrafusp alfa, tepotinib) are credit supportive, despite the heavy focus on avelumab. However, the rating is held back by the division's small market shares and high product concentration rates, with the top three products expected to generate more than 40% of pharmaceutical revenues in 2020 (compared with about 30% at Sanofi, for example). Further divisional upside is provided by Merck's second collaboration with a big pharma peer announced in February 2019. Together with GSK plc, Merck is co-developing and co-commercialising Phase 2 pipeline project bintrafusp alfa (anti-PDL-1) in immuno-oncology. We believe there is additional blockbuster potential in Merck's pipeline for bintrafusp alfa (oncology, anti- PD-L1), which is currently in six Phase 2 developments.

Performance Materials: inclusion of Versum stabilises divisional profits

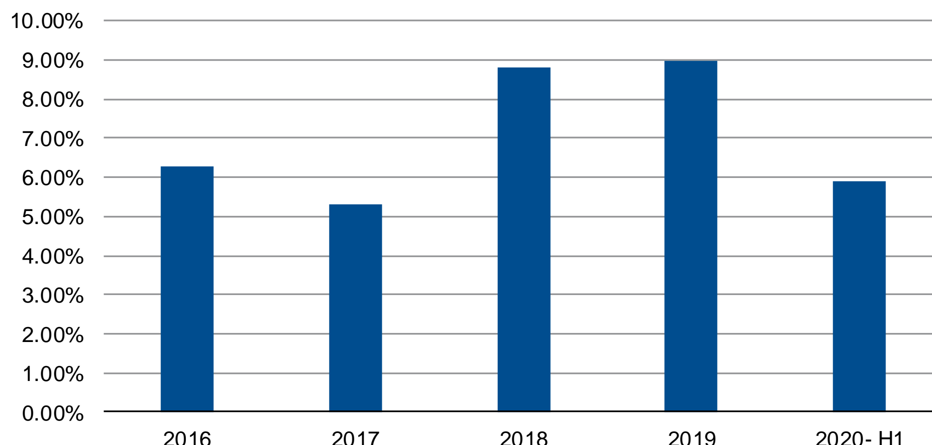
The competitive position of Merck's Performance Materials division is comfortable from a ratings point of view. It is now less firmly based on its liquid crystals exposure and more so on its electronics and semiconductor positions. While operating margins for liquid crystals have fallen from above 45% to below 30% as a consequence of structural changes in the market (heavy price pressure and only moderate sales growth in the future), the other performance materials activities are not generating much lower margins on average. This does not affect the group's overall business risk assessment, in our view. The recent change in the 'divisional mix' has balanced activities (liquid crystals exposure declining, semiconductor exposure increasing) and replaced lost liquid crystals profits with strong contributions from Versum. Furthermore, growth in semiconductor solutions due to rising demand from increasing digitalisation in many industries benefits Merck's credit profile.

Overall, Performance Materials activities have good market shares and margins, attesting to the highly specialised nature of the products. The only activity negatively affected by the coronavirus crisis was surface solutions, which suffered from lower demand via its exposure to the automotive and cosmetics industries. However, as the activity only accounts for about 10% of the total Performance Materials division, its impact is limited. In hindsight, the Versum transaction was of high strategic importance for two reasons: i) it immediately and effectively balanced the lost liquid crystals profits; and ii) it provided a new platform which should allow Merck to benefit from future growth provided by semiconductor solutions.

Life Sciences: strong performance

With the inclusion of Sigma Aldrich, Merck's Life Science division now ranks among the top three suppliers worldwide. All major product categories are covered (except for diagnostic instruments) and market shares are significant. We therefore regard diversification as key to our assessment of the division's competitive position. Furthermore, the division's industry-leading EBITDA margin of 31% (first half of 2020), strong cash generation and significantly above-average revenue growth (6%-9% since 2018) are all strongly supportive from a ratings perspective. The division continued to deliver good results in the first half of 2020 (sales up 5.9%, EBITDA up 10%) and looks set to contribute about 45% to Merck's group EBITDA in 2020. This is despite the mixed effects of the coronavirus crisis on the division so far. While the largest activity, Process Solutions, continued to benefit from strong biological demand, especially in the context of monoclonal antibody production, the Research Solutions segment suffered from shutdowns for one of its major customers: academia. Applied Solutions benefited from increased testing and diagnostics demand, also supported by the present crisis. In addition, management has upgraded its medium-term growth expectations for the division to 6%-9%.

Figure 3: Significant organic growth in Life Science



Source: Merck

Business risk profile rated A

Based on the above and assessing each of the three Merck divisions from a bottom-up perspective, we affirm our rating for Merck's business risk profile at A.

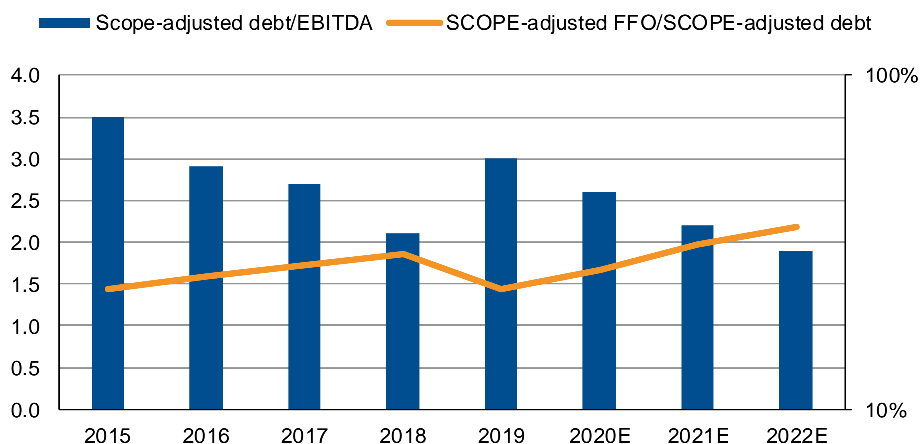
Financial risk profile

Credit metrics

Credit metrics to improve from 2020

Merck's key credit metrics deteriorated in 2019, year-on-year, on account of the Versum acquisition. This was expected, reflecting the full debt impact of the transaction burdening 2020 credit metrics, while only one quarter of Versum's annual cash flows was included, due to the timing of the transaction. We believe that this negative trend in credit metrics is likely to reverse in 2020, based on indications of Versum's strong operating performance so far and assuming there is no second economic lockdown due to coronavirus. We also assume that weaker first-half 2020 demand for individual drugs, mainly related to Covid-19, will recover in the second half of the year. Despite the weaker trend in the first six months of the year, we expect key credit metrics to almost reach our ratio guideline for the ratings: FFO/SaD of about 30% and adjusted EBITDA/SaD of about 2.5x by the end of the year. The second EUR 1.5bn hybrid bond used by Merck in the acquisition financing, with a 50% equity credit, should also help metrics to recover.

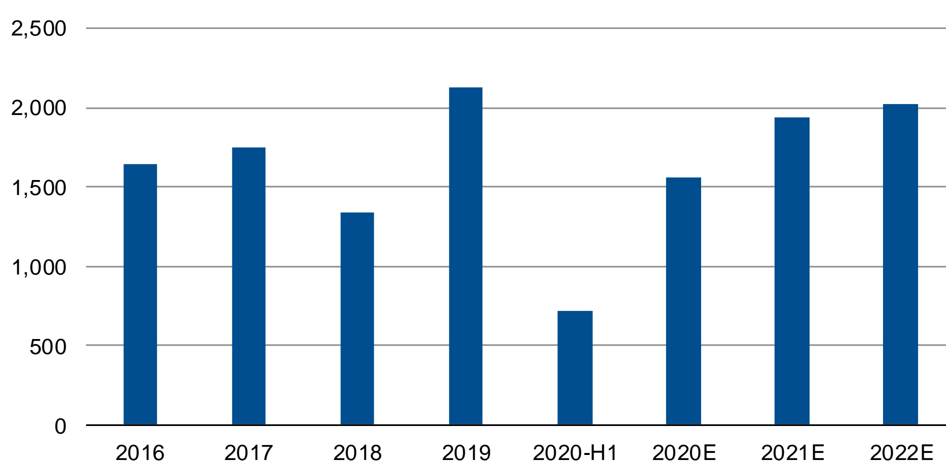
Figure 4: Scope credit ratios



Source: Scope

In recent years, Merck has managed to deliver good free cash generation (see Figure 5 below). The peak in 2019 was mainly due to higher group profit and lower capital expenditure compared to the year before. While the first half of 2020 generated relatively low free cash flows because of lower revenue growth driven by the crisis, we can expect the second half to be significantly stronger. For the next two years, we expect a slightly upward trend, enabled by pharma pipeline deliveries and a consequent fall in cost positions on a relative basis in the respective division. The upward trend should also be supported by the additional contribution from Versum. Rising cash generation, declining relative cost positions and management's deleveraging commitment should lay the groundwork for a further improvement in credit metrics over the coming years.

Figure 5: Expected rise in free cash flows (EUR m)



Source: Merck annual reports, Scope estimates and adjustments

Merck continues to be very solidly financed. Short-term debt maturities remain adequately covered by a combination of internal and external liquidity sources. The group's liquidity profile benefits from continued access to its undrawn multi-year EUR 2bn syndicated bank loan as well as from ample free cash flow generation.

We have affirmed Merck's short-term rating of S-1, based on its solid investment grade rating as well as our positive assessment of the group's liquidity position. This rating also reflects our perception of the group's sustainable, cash-generative business model, which is likely to improve including Versum.

Financial risk profile rated BBB

Based on the above, we affirm our BBB rating for Merck's financial risk profile.

Supportive financial risk profile

We consider Merck's financial policy to be sound and committed, as underlined by the historical deleveraging following major acquisitions in 2012 and 2015. After the Sigma Aldrich acquisition, the group's management stated publicly that it would enter a phase of consolidation and organic growth with a focus on reducing debt quickly, not least motivated by the intention of keeping ratings stable. It has implemented the same strategy following the Versum transaction.

We have reflected this conservative, family-backed ratings commitment in our ratings, providing one notch of uplift.

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