

Pharmaceuticals and Biotechnology sector

Top 10 Companies in the Pharmaceuticals and Biotechnology sector ranked by the RepRisk Rating as of October 2016

Company and Ranking	RepRisk Rating			
	Low Risk AAA – A	Medium Risk BBB – B	High Risk CCC – C	Very High Risk D
1. Amgen Inc	AA			
2. AstraZeneca PLC		BB		
3. Roche Holding AG		BB		
4. Bristol-Meyers Squibb Co		B		
5. Merck & Co Inc		B		
6. Novartis AG		B		
7. Eli Lilly & Co			CCC	
8. GlaxoSmithKline PLC			CCC	
9. Johnson & Johnson			CCC	
10. Pfizer Inc			CCC	

The companies in the ranking were selected from among the largest companies in the sector based on market capitalization and are a representative sample for the purposes of this report.

The RepRisk Rating

The RepRisk Rating is a proprietary risk metric, ranging from AAA to D, that captures and quantifies a company's risk exposure related to environmental, social, and governance (ESG) issues. It combines a company's own ESG risk exposure with the ESG risk exposure of the countries and sectors in which the company has been exposed to risks. The RepRisk Rating facilitates corporate benchmarking and ESG integration. Based on RepRisk's strict, rules-based methodology, the Rating is updated daily for all companies in the RepRisk ESG Risk Platform.

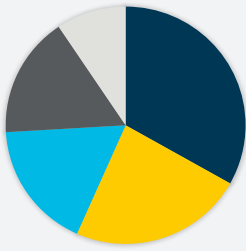
The RepRisk Director's Brief

The RepRisk Rating is the cornerstone of the RepRisk Director's Brief, a corporate benchmarking report that assesses your company's exposure to ESG risks, and benchmarks it with a customizable peer list. The Director's Brief is a data-driven strategy and decision-making tool designed for board members, executives, investor relations and corporate affairs professionals, as well as CSR and sustainability teams.

Director's Briefs will be available as of November 9

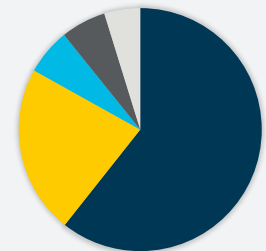
Do you want to benchmark your company? Request more information by emailing us at brief@reprisk.com.

Top ESG Issues



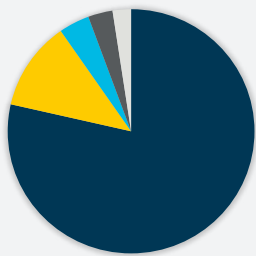
- 1. Products (health & env. issues)
- 2. Fraud
- 3. Corruption, bribery, extortion, and money laundering
- 4. Impacts on communities
- 5. Anti-competitive practices

Top Countries



- 1. USA
- 2. China
- 3. India
- 4. South Korea
- 5. UK

Top ESG Topic Tags



- 1. Genetically modified organisms (GMOs)
- 2. Negligence
- 3. Indigenous people
- 4. Land grabbing
- 5. Animal transportation

NB. Not all risk incidents are linked to Topic Tags.

The charts display the top five environmental, social, and governance (ESG) Issues, Topic Tags (ESG “hot topics”), and countries related to the Pharmaceuticals and Biotechnology sector, based upon the number and severity of the risk incidents in the last two years. For a full list of the ESG Issues and Topic Tags covered by RepRisk, as well as more information on the RepRisk methodology, please visit our website: <https://www.reprisk.com/our-approach>

The Pharmaceuticals and Biotechnology sector has medium ESG risk exposure

Although RepRisk’s data shows a decrease in the risk exposure of the Pharmaceutical and Biotechnology sector in the past two years, there are still reports of corruption and fraud, as well as lawsuits for product liability.

The Chinese authorities have particularly clamped down on corruption in the pharmaceutical sector, fining an executive of Yisheng Pharmaceutical CNY 15.44 million (USD 2.3 million) for insider trading, and Shanghai Fudan Forward Pharmaceutical CNY 267 million (USD 39.6 million) for value-added tax fraud. Huazhong Pharmaceutical, Shandong SINE Pharmaceutical, and Changzhou Siyao Pharmaceuticals have also been fined a total of CNY 2.6 million (USD 385,000) for forming a cartel to market estazolam anti-anxiety tablets.

In the US, Valeant Pharmaceuticals has been accused of using fictitious accounting, and agreed to pay USD 54 million to settle claims that its Salix Pharmaceuticals unit had bribed doctors. GlaxoSmithKline and AstraZeneca have agreed payments of USD 20 million and USD 5.5 million respectively with the US Securities and Exchange Commission to settle allegations of violating the US Foreign Corrupt Practices Act in China.

On the product liability side, Bayer is facing claims in the US from hundreds of women who reported physical injuries after using the company’s Essure birth control device. Sanofi’s anti-epilepsy drug, Depakine, has been linked to congenital malformations among children whose mothers took the drug during pregnancy. GlaxoSmithKline and Merck Sharp & Dohme are being sued in Japan over health problems linked to the companies’ cervical cancer vaccines. Mylan has reached a settlement of USD 465 million with the US Justice Department for overcharging the US Government USD millions for its EpiPen anti-allergy product, but was criticized for increasing the price of the product by 550 percent since 2007.

Amid continued fears about drug resistance, the EU Public Health Alliance has accused Hetero, Hayao, Mylan, and others of dumping untreated pharmaceutical waste containing antibiotics into water sources in China and India.

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To identify the key challenges and hot spots for your company with respect to ESG, email us at brief@reprisk.com.