



The Global Health Impact Index

Ranking Explanation

Reference Table

Drug Abbreviation

1. AL
2. AS+AQ
3. AS+MQ
4. AS+SP
5. DHA-PPQ
6. Amk
7. Cm
8. Cs
9. E
10. Eto
11. Gfx
12. H
13. Km
14. Lfx
15. Mfx
16. Ofx
17. PAS
18. R
19. S
20. Z
21. 3TC
22. ABC
23. ATV/r
24. AZT
25. ddl
26. d4T
27. EFV
28. FTC
29. LPV/r
30. NFV
31. NVP
32. TDF

Drug Name

1. Artemether-Lumefantrine
2. Artesunate + Amodiaquine
3. Artesunate + Mefloquine
4. Artesunate + Sulfadoxine-Pyrimethamine
5. Dihydroartemisinin-Piperaquine
6. Amikacin
7. Capreomycin
8. Cycloserine
9. Ethambutol
10. Ethionamide
11. Gatifloxacin
12. Isoniazid
13. Kanamycin
14. Levofloxacin
15. Moxifloxacin
16. Ofloxacin
17. 4-aminosalicylic acid
18. Rifampicin
19. Streptomycin
20. Pyrazinamide
21. Lamivudine
22. Abacavir
23. Atazanavir/ritonavir
24. Zidovudine
25. Didanosine
26. Stavudine
27. Efavirenz
28. Emtricitabine
29. Lopinavir with a ritonavir boost
30. Nelfinavir
31. Nevirapine
32. Tenofovir

MALARIA

TUBERCULOSIS

HIV



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19. Bayer AG
20. Kyorin Pharmaceutical

Company Ranking Explanation

Sanofi

Total Impact score of 20,180,440.57

Main Drugs

AS+AQ, AS+SP, Eto, R

Treats

Malaria & TB

Final Impact for Malaria

13,579,865.04

Final Impact for TB

6,600,575.53

Sanofi's drugs have a total impact score of 20,180,440.57. Of that score, 67.29%, or 13,579,865.04, comes from treating malaria and 32.71%, or 6,600,575.53, comes from treating TB.

Sanofi receives credit for two widely-used first-line treatments against malaria, AS+AQ and AS+SP. These two malaria drugs are responsible for averting the loss of 50.07% of the worldwide DALYs that we estimate would have been lost due to malaria in 2010 in the absence of effective treatment. With respect to malaria, Sanofi's drugs together averted the loss of more DALYs than any other company's drugs.

Sanofi also receives credit for two TB drugs, Eto and R. Eto is especially important in treating multidrug-resistant TB (MDR-TB) because it is included in all three MDR-TB treatment regimens. R is also important because it is one of the drugs in the standard first-line regimen against TB. Sanofi's TB drug portfolio helped to prevent 24.97% of the DALYs that we estimate would have been lost to TB in 2010. Sanofi's drug portfolio placed it second in terms of total averted DALYs for TB.

Although Sanofi's drugs do not top those of other companies in every aspect that we measured, their good performance in helping to alleviate the global burden of malaria and TB put Sanofi in first place in our index.



Company Ranking Explanation

Novartis

Total Impact score of 13,555,410.12

Main Drugs

AL, ATV/r (half)

Treats

Malaria & HIV

Final Impact for Malaria

13,534,956.85

Final Impact for HIV

20,453.27

Novartis' drugs have a total impact score of 13,555,410.12. Of that score, 99.85%, or 13,534,956.85, results from treating malaria and 0.15%, or 20,453.27, is attributable to its antiretroviral treatments for HIV/AIDS.

Novartis's antimalarial drug, AL, performs second best in almost every aspect among all antimalarial treatments. It averts the loss of 49.90% of the worldwide DALYs that we estimate would have been lost due to malaria in 2010, in the absence of effective treatment. It is also the most used antimalarial drug worldwide.

104 countries specify a first-line treatment for Falciparum malaria. Of these, 53 recommend AL as either the sole drug or as one amongst a few recommended treatments. Moreover, AL ranks as the second most effective antimalarial drug, with an average efficacy of 98.10%.

Novartis also shares credit (with Abbott) for an HIV/AIDS drug, ATV/r, which averts the loss of 0.09% of the total HIV/AIDS-related DALYs. Due to the impressive performance of AL, Novartis ranks second in our index.



Company Ranking Explanation

Pfizer Inc

Total Impact score of 13,209,904.58

Main Drugs

Cs, E, Z, PAS

Treats

TB

Final Impact for TB

13,209,904.58

Pfizer's drugs have a total impact score of 13,209,904.58. Pfizer's four anti-TB drugs averted more of the DALYs due to TB than any other company's drugs and they prevented the loss of 49.97% of the DALYs that we estimate would have been lost to TB without treatment in 2010.

Pfizer's E and Z are two of the drugs in the first-line regimen against TB. Its Cs and PAS are essential ingredients in treatment of multidrug-resistant TB (MDR-TB). All three MDR-TB treatment regimens include Cs and PAS.

Although Pfizer's four anti-TB drugs have a greater global impact than all other anti-TB drugs, TB has a smaller impact on overall DALYs than HIV/AIDS and malaria. Thus Pfizer ranks third in our index.



Company Ranking Explanation

Shire Pharmaceuticals

Total Impact score of 7,382,869.52

Main Drugs

3TC

Treats

HIV

Final Impact for HIV

7,382,869.52

Shire Pharmaceuticals' drugs have a total impact score of 7,382,869.52. This impact score comes exclusively from treating HIV/AIDS.

Shire's 3TC is the most-used first-line antiretroviral drug to treat HIV/AIDS. 3TC is included in 87.5% of first-line antiretroviral regimens for adults and 85.7% of first-line pediatric antiretroviral regimens. 3TC is particularly important for treating children in low- and middle-income countries outside of the Americas as part of a first-line regimen – 8 out of 9 treatments for children in these countries include 3TC, which accounts for 98.5% of the treatment coverage. In 2010, 3TC helped to avert the loss of the most HIV/AIDS-attributable DALYs: 31.17% of all the estimated DALYs that would have been lost to HIV/AIDS in 2010.

Although Shire Pharmaceuticals receives credit for 3TC, its total impact score puts Shire Pharmaceuticals in fourth place in our index.



Company Ranking Explanation

Hoffman-LaRoche

Total Impact score of 6,587,721.05

Main Drugs

H

Treats

TB

Final Impact for TB

6,587,721.05

Hoffman-LaRoche's sole TB drug has a total impact score of 6,587,721.05. H serves as one of four drugs in the standard first-line regimen for drug-susceptible TB. Among all TB drugs, H performs third best in preventing the loss of DALYs globally. It alone averted the loss of 6,587,721.05 DALYs — 24.92% of the total DALYs that would have been lost to TB in 2010 without treatment.

Hoffman-LaRoche ranks fifth in our index.



Company Ranking Explanation

Boehringer Ingelheim Pharmaceuticals

Total Impact score of 4,459,685.33

Main Drugs

NVP Treats

HIV

Final Impact for HIV

4,459,685.33

Boehringer Ingelheim Pharmaceuticals' drug, NVP, has a total impact score of 4,459,685.33. NVP is used in many first-line antiretroviral regimens to treat HIV/AIDS. Most of NVP's score came from treating adults in low- and middle-income countries outside of the Americas. Combined with other drugs, NVP accounts for 59.7% of adult first-line treatment in these countries. In 2010, NVP helped to prevent the loss of 4,459,685.33 HIV/AIDS-related DALYs worldwide, which accounts for 18.83% of the loss averted through HIV/AIDS treatment. In terms of total loss of DALYs prevented, NVP ranks second among all other anti-HIV/AIDS drugs.

Overall, Boehringer Ingelheim Pharmaceuticals ranks sixth in our index.



Company Ranking Explanation

Bristol-Myers Squibb

Total Impact score of 3,268,276.09

Main Drugs

Amk, ddl, d4T, Km

Treats

Malaria & TB

Final Impact for HIV

3,254,227.49

Final Impact for TB

14,048.60

Bristol-Myers Squibb drugs achieve a total impact score of 3,268,276.09. Of this score, 99.57%, or 3,254,227.49, comes from treating HIV/AIDS and 0.43%, or 14,048.60, from treating TB.

Bristol-Myers Squibb receives credit for two HIV/AIDS drugs, ddl and d4T. As a first-line treatment, ddl is used only for children in low- and middle-income countries in the Americas while, as a second-line treatment, ddl is used by adults in low- and middle-income countries outside of the Americas and by children in all low- and middle-income countries. Most of ddl's score came from its treatment for children in low- and middle-income countries outside of the Americas (as a second-line treatment). When combined with other drugs, ddl is included in 39.60% of second-line treatment regimens for children in these countries. Most of the score of d4T came from its use in first-line treatment for children in low- and middle-income countries outside of the Americas. In combinations with other drugs, d4T is part of 56.4% of first-line treatment regimens for children in these countries.



Company Ranking Explanation

Bristol-Myers Squibb

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Main Drugs

Amk, ddl, d4T, Km

Treats

Malaria & TB

Final Impact for HIV

3,254,227.49

Final Impact for TB

14,048.60

Bristol-Myers Squibb also receives credit for two TB drugs, Amk and Km. Km is used to treat both multidrug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB) while Amk is used only to treat XDR-TB. Most of Km's score came from its use in a treatment against MDR-TB. The treatment regimen Km + Lfx + Eto + Cs + PAS receives credit for 74% of the total impact of MDR-TB treatment; Km receives 1/5 of the impact of this treatment regimen.

Bristol-Myers Squibb's HIV/AIDS drugs helped to prevent the loss of 13.74% of the total global HIV/AIDS-related DALYs burden that we estimate would have been lost in 2010 in the absence of effective treatment. Its TB drugs helped to avert the loss of 0.05% of the total TB-related DALYs. Combining its TB and HIV/AIDS scores, Bristol-Myers Squibb ranks seventh in our index.



Company Ranking Explanation

Viiv Healthcare

Total Impact score of 3,178,652.73

Main Drugs

ABC, AZT, NFV

Treats

HIV

Final Impact for HIV

3,178,652.73

Viiv Healthcare's drugs achieve a total impact score of 3,178,652.73.

Viiv Healthcare receives credit for three drugs for HIV/AIDS: ABC, AZT and NFV. Most of ABC's score came from treating children in low- and middle-income countries outside of the Americas as a second-line treatment. ABC is included in 42.6% of second-line treatment regimens for children in low- and middle-income countries outside of the Americas. AZT is an important drug for first-line treatment of children in low- and middle-income countries in the Americas. All six first-line treatments in these countries include AZT. In addition, AZT is especially effective when combined with 3TC and EFV to treat HIV/AIDS in adults in low- and middle-income countries in the Americas. Their estimated combined effectiveness is 82.00%, which tops all other first-line regimens for adults in these countries. Lastly, NFV is used as a regimen in both first-line and second-line treatments of children in low- and middle-income countries in the Americas. All of NFV's score came from the treatments for children in these countries.

Combining the impact scores of its three drugs, Viiv Healthcare's drugs helped to avert the loss of 3,178,652.73 DALYs due to HIV/AIDS, 13.42% of the total HIV/AIDS DALYs alleviated in the world in 2010. Viiv Healthcare ranks eighth in our index.



Company Ranking Explanation

Merck

Total Impact score of 3,064,466.96

Main Drugs

EFV, S

Treats

TB & HIV

Final Impact for HIV

3,061,495.58

Final Impact for TB

2,971.38

Merck's drug portfolio has a total impact score of 3,064,466.96. Of its score, 99.90%, or 3,061,495.58, comes from its drugs for HIV/AIDS and 0.10%, or 2,971.38, comes from its drugs for TB.

Merck's sole antiretroviral drug for HIV/AIDS, EFV, accounts for most of its score. EFV serves as a key drug in both first-line and second-line treatments for HIV/AIDS. EFV receives most of its score from its inclusion in first-line treatment regimens for adults in low- and middle-income countries in the Americas. EFV is included in 53.1% of first-line treatment regimens for adults in these countries. EFV is especially effective when combined with AZT and 3TC.

Merck's TB drug, S, is used in regimens to treat multidrug-resistant TB (MDR-TB). S is included in two out of three treatment regimens against MDR-TB.

With its two drugs, Merck helped to avert 12.93% of total DALYs alleviated by any company's drugs for HIV/AIDS and 0.011% of total for TB. Combing the total impact of both drugs, we rank Merck ninth in our index.



Company Ranking Explanation

Gilead Science

Total Impact score of 1,989,941.39

Main Drugs

FTC, TDF

Treats

HIV

Final Impact for HIV

1,989,941.39

Gilead Sciences drugs have a total impact score of 1,989,941.39. All of its score comes from its drugs for HIV/AIDS. Gilead Sciences receives credit for two drugs for HIV/AIDS: FTC and TDF. FTC serves as a key drug in treating adults in low and middle income countries. Most of FTC's score came from its inclusion in second-line treatment regimens for adults in low and middle income countries outside of the Americas. FTC is included in 10.70% of second-line treatment regimens for adults in these countries.

Gilead Science's second drug for HIV/AIDS is TDF, which is included in regimens for adults in low and middle income countries. TDF is also part of a second-line regimen to treat children in low and middle income countries outside of the Americas, though this treatment regimen only accounts for 2% of second-line treatments for children in these countries. Most of TDF's score came from treating adults in low and middle income countries in the Americas as a second-line regimen. TDF is included in 6 out of 10 second-line treatments against HIV/AIDS for adults in these countries. Combined with other drugs, TDF is part of 54.2% of second-line treatment regimens for adults in low and middle income countries in the Americas.

Combing the impact of its two drugs, Gilead Science's drugs account for 8.40% of the total DALYs alleviated that would have been lost to HIV/AIDS in the world of 2010. Its total impact score puts Gilead Sciences in tenth place in our index.



Company Ranking Explanation

Abbot Laboratories

Total Impact score of 335,233.33

Main Drugs

LPV/r, ATV/r (half)

Treats

HIV

Final Impact for HIV

335,233.33

Abbott Laboratories' drugs have a total impact score of 335,233.33. This score comes solely from its HIV/AIDS portfolio.

Abbott Laboratories receives credit for LPV/r and half of the credit for ATV/r (with Novartis). LPV/r is included in regimens for treating adults and children in low- and middle-income countries. Most of LPV/r's score came from its inclusion in second-line treatment for adults in low- and middle-income countries outside of the Americas. All second-line treatments of adults in these countries include LPV/r. LPV/r is most effective when combined with TDF and 3TC. ATV/r is used only to treat adults in low and middle income countries in the Americas. Most of ATV/r's score came from treating these adults as a second-line regimen. ATV/r is included in 14.80% of second-line treatments for adults in these countries.

Combining the impact of its two drugs, Abbott Laboratories accounted for 1.42% of total DALYs averted that would have been lost to HIV/AIDS without treatment in 2010. The total impact score of Abbott Laboratories' drugs ranks it eleventh in our index.



Company Ranking Explanation

Daichii Sankyo

Total Impact score of 15,978.61

Main Drugs

Lfx, Ofx

Treats

TB

Final Impact for TB

15,978.61

Daichii Sankyo's drugs combine for a total impact score of 15,978.61. This entire score is attributable to its drugs for TB.

Daichii Sankyo receives credit for two TB treatments: Lfx and Ofx. Lfx is an essential drug for treating multidrug-resistant TB (MDR-TB). All three regimens for MDR-TB include Lfx. Ofx is also included in the treatment regimen for extensively drug-resistant TB (XDR-TB).

Combining the impact of its two drugs, in 2010 Daichii Sankyo's drugs averted 0.06% of the total DALYs we estimate would have been lost to TB in the absence of effective treatment. Its total impact score ranks Daichii Sankyo at the twelfth place in our index.



Company Ranking Explanation

Chongqing Tonghe Pharmaceutical Co. Ltd.

Total Impact score of 6,730.11

Main Drugs

DHA-PPQ

Treats

Malaria

Final Impact for Malaria

6,730.11

Chongqing Tonghe Pharmaceutical Co. Ltd. has a drug portfolio with a total impact score of 6,730.11. This score comes entirely from its antimalarial drugs.

Chongqing Tonghe receives credit for DHA-PPQ, which serves as a first-line treatment against malaria. Most of DHA-PPQ's score came from its average treatment efficacy, which ranks second (97.50%) among all malaria drugs. Additionally, DHA-PPQ is used as a first-line antimalarial drug in five countries.

In 2010, Chongqing Tonghe's DHA-PPQ helped to prevent the loss of 0.02% of the total malaria-attributable DALYs. Chongqing Tonghe Pharmaceutical Co. Ltd. comes in thirteenth place in our index.

Company Ranking Explanation

Eli Lilly

Total Impact score of 2,082.75

Main Drugs

Cm

Treats

TB

Final Impact for TB

2,082.75

Eli Lilly's drugs achieve a total impact score of 2,082.75. Its score comes solely from a single drug for TB. Eli Lilly's TB drug, Cm, serves to treat extensively drug-resistant TB (XDR-TB). It helps to alleviate 0.008% of the total DALYs that we estimate would have been lost to TB without treatment in 2010. Eli Lilly is ranked fourteenth in our index.

Company Ranking Explanation

Bayer Healthcare

Total Impact score of 1,562.06

Main Drugs

Mfx

Treats

TB

Final Impact for TB

1,562.06

Bayer Healthcare's drugs have a total impact score of 1,562.06. Its entire score comes from its drugs for TB. Bayer Healthcare's TB drug, Mfx, is part of the treatment regimen for extensively-drug resistant TB (XDR-TB). In 2010, Mfx helped to alleviate 0.006% of the total DALYs that would have been lost to TB without treatment in 2010. Its total impact score ties Bayer Healthcare with Kyorin Pharmaceutical Co., Ltd. at the fifteenth place in our index.

Company Ranking Explanation

Kyorin Pharmaceutical Co., Ltd.

Total Impact score of 1,562.06

Main Drugs

Gfx

Treats

TB

Final Impact for TB

1,562.06

Kyorin Pharmaceutical Co., Ltd. has a drug portfolio with a total impact score of 1,562.06. Its entire score comes from a single drug for TB. Kyorin's TB drug, Gfx is part of the treatment regimen for extensively drug-resistant TB (XDR-TB). In 2010, Gfx helped to alleviate 0.006% of the total DALYs that would have been lost to TB without treatment in 2010. Its total impact score ties Kyorin Pharmaceutical Co., Ltd. with Bayer Healthcare at fifteenth in our index.