

# NEGLECTED DISEASE FUNDERS

## FUNDER OVERVIEW

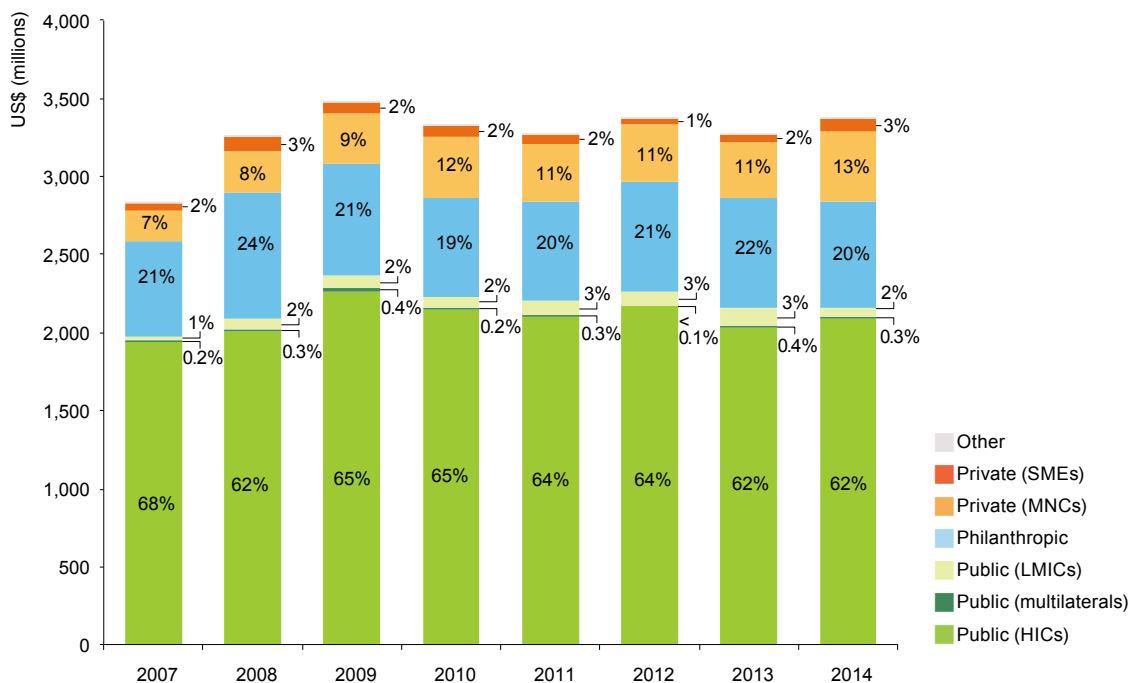
The public sector once again provided almost two-thirds of neglected disease R&D funding (\$2,165m, 64%), with the vast majority of this coming from HIC governments and multilaterals (\$2,101m, 97%). The philanthropic sector provided 20% (\$678m), and industry the remaining 16% (\$534m). Not only did this represent a marked increase in industry funding share (from 12% in 2013) and a drop in public sector funding share (from 66% in 2013), but also the highest ever industry share and equal lowest public sector share in the history of the G-FINDER survey.

The YOY total funding increase of \$150m (4.9%) was driven entirely by industry and HIC public funders. Public funding increased by \$55m (2.7%), due to an increase of \$72m (up 3.7%) from HICs, mainly due to new Ebola funding. When Ebola funding is excluded, public funding actually decreased by \$62m (-3.1%).

Industry funding increased significantly, up \$98m (28%) due to MNC investment in malaria, Ebola and HIV/AIDS. Most of this increase was from malaria and HIV/AIDS: with Ebola excluded, industry investment still grew by \$64m (up 18%).

Philanthropic funding was essentially unchanged at \$678m (down \$3.2m, -0.5%).

**Figure 20. Total R&D funding by sector 2007-2014**



## PUBLIC FUNDERS

As has been the case in each of the past seven years, the top three public funders in 2014 were the US, the UK and the EC. Once again, the US contributed over two-thirds of global public funding (71%, up from 68% in 2013). And once again, the US contribution of \$1,529m was more than 11 times larger than that of the next biggest public funder (the UK, with \$135m).

YOY public funding for neglected disease R&D increased by \$55m in 2014 (up 2.7%), entirely driven by new investment in Ebola. Ebola received a total of \$118m from public funders, with the vast majority of this (\$101m, 86%) coming from the US.

Significant new public investment in Ebola hid a more concerning trend: with Ebola excluded, YOY public funding for neglected disease R&D actually fell by \$62m (-3.1%), further compounding the larger US sequester-related cuts seen in 2013.

US Government funding increased by \$71m (4.9%), mainly due to new Ebola funding (\$101m). Without Ebola, US Government funding actually dropped by \$29m (-2.0%), driven by the US NIH (down \$37m, -2.9%) and USAID (down \$4.7m, -5.8%). On the other hand, US CDC more than doubled its funding (up \$12m from a relatively low base), despite not having any Ebola-related investment.

Australian public funding increased by \$13m (47%), due to the first disbursements of a renewed PDP funding stream from the Department of Foreign Affairs and Trade (DFAT, \$9.0m following zero investment in 2013) and a smaller increase from the Australian NHMRC (up \$4.0m, 15%).

Funding from France dropped by \$15m (-17%). Ebola funding from Inserm hid decreases in their other disease areas, and with Inserm's Ebola investment excluded, the French Government's R&D investment actually decreased by \$24m (-28%).

**Table 32. Top public R&D funders 2014**

Country	US\$ (millions)								2014 % of total
	2007	2008	2009	2010	2011	2012	2013	2014	
United States of America	1,408	1,429	1,649	1,570	1,536	1,637	1,461	1,529	71
United Kingdom	106	108	151	166	134	94	129	135	6.2
European Commission	133	144	131	101	118	104	123	126	5.8
France	17	32	53	44	67	60	88	73	3.4
Germany	13	4.1	38	41	36	61	50	54	2.5
Australia	24	33	29	33	41	52	27	40	1.9
India		39	26	40	44	44	52	40	1.8
Switzerland	8.1	5.1	9.2	16	16	18	19	20	0.9
Netherlands	37	30	32	20	27	17	26	20	0.9
Canada	22	26	19	10	10	19	21	17	0.8
Japan	4.6	7.5	6.3	9.6	3.3	2.5	12	11	0.5
Brazil	27	28	37	13	13	24	19	11	0.5
Subtotal of top 12 <sup>^</sup>	1,859	1,943	2,221	2,082	2,067	2,149	2,027	2,077	96
Total public funding	1,979	2,095	2,361	2,233	2,200	2,267	2,158	2,165	100

<sup>^</sup> Subtotals for 2007–2013 top 12 reflect the top funders for those respective years, not the top 12 for 2014

— No funding organisations from this country participated in the survey for this year

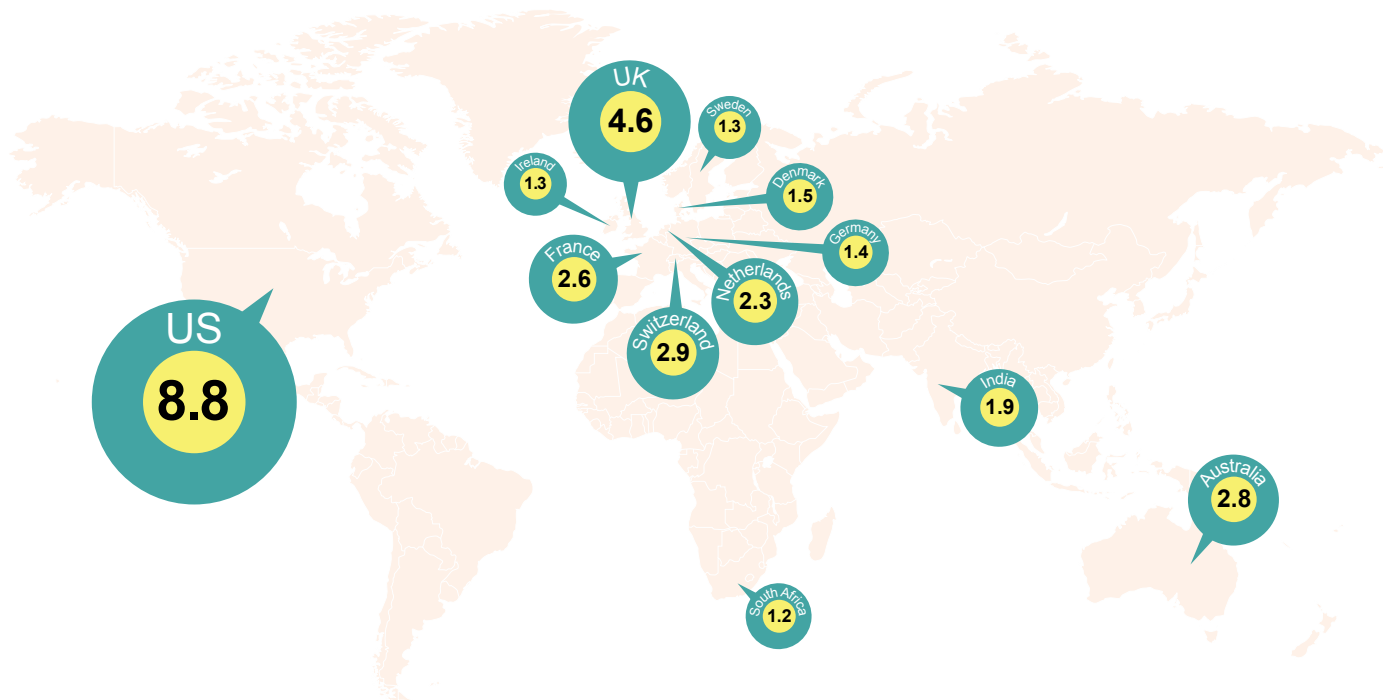
Overall IDC<sup>i</sup> public funding fell by \$18m (-28%), primarily driven by a drop in Indian public funding (down \$13m, -24%). This was the result of a substantial cut from the Indian DBT, which provided just \$2.9m in 2014 (after consistently contributing over \$10m in previous years).

**PUBLIC FUNDING BY GDP**

Absolute funding can be a misleading measure of public R&D investment, as it can underplay the contributions of smaller countries and LMICs. For this reason, we have also analysed country investments in neglected disease R&D in relation to their gross domestic product (GDP).

When analysed by proportion of GDP rather than absolute funding, a slightly different picture of public funding emerges. Four countries not ranked in the top 12 funders by absolute funding appear when ranked by contribution relative to GDP: Sweden, Denmark, South Africa and Ireland. In contrast, four countries ranked in the top 12 funders by absolute funding amount – Canada, Japan, the EC and Brazil – drop out of the list when GDP is factored in. However, the majority of countries remain in the top 12 funders using either metric, including the US, UK, France, Germany, Australia, India, Switzerland, and the Netherlands. Notably, Switzerland reported the third highest ratio of public funding to GDP in 2014, even though it ranks eighth by absolute funding amount.

**Figure 21. Public R&D funding by GDP 2014<sup>^\*</sup>**  
**(A value of 10 is equivalent to an investment of 0.01% of GDP)**



<sup>^</sup> GDP figures taken from International Monetary Fund (IMF) World Economic Outlook database  
<sup>\*</sup> Figure provides value of (US\$ funding / GDP) \* 100,000

<sup>i</sup> IDC increases or decreases refer to organisations that participated in both 2013 and 2014, as IDC survey participation is inconsistent from year to year

## HIGH-INCOME COUNTRIES AND MULTILATERALS

HIC governments and multilaterals provided \$2,101m in neglected disease R&D funding in 2014, accounting for 97% of total public funding. YOY funding increased by \$70m (up 3.6%), but this was entirely a result of the \$118m in funding for Ebola R&D – almost all of which was new funding. Outside of Ebola, funding for all other neglected disease R&D decreased by \$47m (-2.4%), further extending the \$147m US sequester-related cut of the preceding year.

As in previous years, the top three best-funded diseases (HIV/AIDS, malaria and TB) received almost three-quarters of all HIC public funding (\$1,489m, 71%). The rapid influx of new investment in Ebola made it the fourth-best funded disease, receiving 5.6% of HIC public funding. The US Government provided the vast majority of this (\$101m, 86%), primarily via the US NIH (\$64m), with the remainder coming from the US HHS (\$26m) and the US DTRA (\$11m). This is the first reported funding for neglected disease R&D to come from either the US HHS – with these funds administered by the department's Biomedical Advanced Research and Development Authority (BARDA) – or the US DTRA.

In addition to new investment in Ebola, HIC and multilateral funding also increased for TB (up \$27m, 10%) and dengue (up \$6.3m, 14%), with both of these increases driven by the US NIH. The biggest reduction in funding was for HIV/AIDS (down \$26m, -2.9%), followed by malaria (down \$9.4m, -3.3%) and bacterial pneumonia & meningitis (down \$7.6m, -30%). The remainder of the drop in HIC and multilateral public funding was for multiple-disease (unspecified) R&D (down \$24m, -35%) and platform technologies (down \$18m, -62%). Funding for diarrhoeal diseases, kinetoplastids and helminth infections remained fairly stable.

**Table 33. Public (HIC and multilaterals) R&D funding by disease 2007-2014**

Disease or R&D area	US\$ (millions)								2014 % of total
	2007	2008	2009	2010	2011	2012	2013	2014	
HIV/AIDS	1,077	1,062	1,089	1,012	973	1,002	924	888	42
Tuberculosis	247	235	349	319	289	283	284	309	15
Malaria	244	264	299	323	300	295	298	293	14
Ebola								118	5.6
Diarrhoeal diseases	50	69	104	85	94	88	91	87	4.1
Kinetoplastids	51	90	107	108	99	96	78	84	4.0
Dengue	40	44	58	52	58	55	45	50	2.4
Helminths (worms & flukes)	42	37	54	52	50	61	53	47	2.3
Salmonella infections	10	30	37	38	34	41	41	40	1.9
Bacterial pneumonia & meningitis	11	11	14	18	29	17	29	21	1.0
Hepatitis C (genotypes 4, 5 & 6)							14	14	0.7
Trachoma	<0.1	2.0	2.0	3.0	6.3	9.3	5.6	6.5	0.3
Cryptococcal meningitis							3.0	5.7	0.3
Leprosy	4.0	4.1	7.0	3.9	4.5	11	6.0	5.7	0.3
Leptospirosis							0.4	1.3	0.1
Rheumatic fever	2.0	1.4	1.7	1.9	1.0	1.0	0.9	1.3	0.1
Buruli ulcer	2.5	1.7	1.7	4.2	3.8	3.8	4.5	0.7	<0.1
Platform technologies	3.4	6.2	7.8	11	12	27	29	11	0.5
<i>General diagnostic platforms</i>	1.3	2.2	2.1	5.8	9.3	7.7	9.0	6.3	0.3
<i>Adjuvants and immunomodulators</i>	<0.1	0.8	3.0	4.2	2.1	18	16	3.3	0.2
<i>Delivery technologies and devices</i>	2.1	3.1	2.7	1.3	0.5	0.4	4.0	1.7	0.1
Core funding of a multi-disease R&D organisation	106	96	73	77	95	74	74	70	3.3
Unspecified disease	55	65	77	47	67	106	70	48	2.3
<b>Total public funding (HICs/multilaterals)</b>	<b>1,947</b>	<b>2,017</b>	<b>2,282</b>	<b>2,156</b>	<b>2,115</b>	<b>2,171</b>	<b>2,050</b>	<b>2,101</b>	<b>100</b>

■ New disease added to G-FINDER in 2013 or 2014

#### LOW- AND MIDDLE-INCOME COUNTRIES

Public institutions in LMICs reported \$63m in funding for neglected disease R&D in 2014, accounting for 2.9% of all public funding. This included \$56m from YOY funders who participated in both 2013 and 2014, and \$7.6m from irregular participants.<sup>ii</sup> Inconsistent survey participation by many LMIC organisations makes year to year comparison of funding difficult, but funding reported by YOY funders was down by \$23m (-30%).<sup>iii</sup>

<sup>ii</sup> LMIC increases or decreases refer to organisations that participated in both 2013 and 2014, as LMIC survey participation is inconsistent from year to year

<sup>iii</sup> Figures for 2010-2013 LMIC investment are lower than reported in the previous report as Chile and Russia became HICs in FY2014. Chilean and Russian investment across all years is now included under the High-income countries and multilaterals section

In 2014, 87% of LMIC public investment came from three IDCs: India (\$40m, 73%), Brazil (\$11m, 20%) and South Africa (\$4.3m, 7.8%).

YOY LMIC funding decreased substantially for TB, malaria and HIV/AIDS, usually the top three diseases (down \$24m, -45%). Funding for TB halved (down \$16m, -51%), although some of this reduction may be related to changed reporting between 2013 and 2014. Funding for HIV/AIDS fell by \$6.0m (-55%) and for malaria by \$2.3m (-20%).

As a result of these decreases, kinetoplastids moved into the top three diseases for the first time in four years (up \$2.0m, 29%).

Inconsistent survey participation by LMIC public funders is the reason for the much larger apparent drops in overall HIV/AIDS and malaria funding, and other minor discrepancies.

There was no investment in Ebola R&D reported by LMIC public funders.

**Table 34. Public (LMIC) R&D funding by disease 2010-2014**

Disease or R&D area	US\$ (millions)					2014 % of total
	2010	2011	2012	2013	2014	
Tuberculosis	12	18	17	35	15	24
Kinetoplastids	12	9.9	14	8.6	9.5	15
Malaria	10	13	22	22	9.2	15
HIV/AIDS	19	19	15	19	6.8	11
Diarrhoeal diseases	7.7	13	5.2	5.3	6.0	9.5
Leprosy	3.7	2.5	2.4	4.9	3.5	5.6
Dengue	6.7	4.8	7.8	3.6	3.5	5.5
Helminths (worms & flukes)	1.2	2.1	3.2	1.8	3.0	4.8
Salmonella infections	0.8	0.5	0.5	0.6	0.7	1.1
Bacterial pneumonia & meningitis	0.4	0.1	0.3	<0.1	0.4	0.6
Hepatitis C (genotypes 4, 5 & 6)				5.4	0.3	0.5
Leptospirosis				-	0.1	0.2
Platform technologies	3.5	0.5	4.6	0.6	0.5	0.8
<i>Delivery technologies and devices</i>	1.9	<0.1	3.8	0.4	0.3	0.5
<i>General diagnostic platforms</i>	0.9	0.5	0.6	<0.1	0.1	0.2
<i>Adjuvants and immunomodulators</i>	0.6	-	0.1	0.1	<0.1	<0.1
Core funding of a multi-disease R&D organisation	0.9	0.3	-	0.4	0.3	0.4
Unspecified disease	-	0.5	4.6	2.4	4.3	6.8
<b>Total public funding (LMICs)</b>	<b>77</b>	<b>85</b>	<b>97</b>	<b>109</b>	<b>63</b>	<b>100</b>

- No reported funding

■ New disease added to G-FINDER in 2013 or 2014

## PHILANTHROPIC FUNDERS

Philanthropic funders provided \$678m for neglected disease R&D in 2014, representing 20% of total funding. The two largest investors – the Gates Foundation and the Wellcome Trust – together contributed 97% of this amount (\$660m), up from 94% in 2013.

YOY philanthropic funding was essentially stable (down \$3.2m, -0.5%). The drop in funding from the Wellcome Trust (down \$8.8m, -6.4%) was related to cyclical funding for major overseas programmes, and was partially offset by slightly increased investment from the Gates Foundation (up \$5.8m, 1.1%).

**Table 35. Top philanthropic R&D funders 2014**

Funder	US\$ (millions)								2014 % of total	2007-2014 trend
	2007	2008	2009	2010	2011	2012	2013	2014		
Gates Foundation	518	690	627	516	512	508	526	531	78	
Wellcome Trust	60	63	69	81	96	149	137	128	19	
MSF	7.9	8.0	5.1	5.2	5.8	6.4	6.6	5.3	0.8	
UBS Optimus Foundation	0.6	1.2	1.2	8.0	6.0	3.6	3.0	4.0	0.6	
Funds raised from the general public	2.3	1.4	0.5	0.4	0.5	0.4	0.8	1.0	0.2	
Carolito Foundation				0.4	<0.1	0.5		0.9	0.1	
TLMI				0.3	0.4	0.4	0.6	0.6	<0.1	
Medicor Foundation			0.6	0.9	0.7	0.6	0.8	0.6	<0.1	
New Venture Fund								0.5	<0.1	
ExxonMobil Foundation	2.2	2.0	1.5	0.8	0.3	0.5		0.5	<0.1	
Fondation Mérieux	-	-	0.1	2.1	1.2	0.7	0.5	0.5	<0.1	
All other philanthropic organisations	18	32	16	19	17	31	33	4.1	0.6	
<b>Total philanthropic funding</b>	<b>610</b>	<b>798</b>	<b>721</b>	<b>634</b>	<b>640</b>	<b>702</b>	<b>708</b>	<b>678</b>	<b>100</b>	

- No reported funding

■ Funding organisation did not participate in the survey for this year. Any contributions listed are based on data reported by funding recipients so may be incomplete

With overall funding from the sector remaining flat, the most notable changes in philanthropic funding in 2014 were in the distribution between diseases. Most of these changes reflected the disbursements of the Gates Foundation, which provided more than three-quarters (\$531m, 78%) of all philanthropic funding in 2014.

The Gates Foundation was entirely responsible for the increases in philanthropic funding for malaria (up \$17m, 11%) and kinetoplastids (up \$13m, 62%), just as it was for the decreases seen for HIV/AIDS (down \$9.1m, -6.3%) and diarrhoeal diseases (down \$8.0m, -15%).

Only two philanthropic organisations – the Gates Foundation and Wellcome Trust – reported providing funding for Ebola R&D in 2014. Their combined contribution of \$12m was just 7.3% of global Ebola R&D investment, around a third of the 20% share that this sector contributes to overall neglected disease R&D funding.

**Table 36. Philanthropic R&D funding by disease 2007-2014**

Disease or R&D area	US\$ (millions)								2014 % of total
	2007	2008	2009	2010	2011	2012	2013	2014	
Malaria	174	230	241	139	202	169	155	170	25
Tuberculosis	136	158	123	136	117	122	145	149	22
HIV/AIDS	116	199	151	153	152	162	150	137	20
Diarrhoeal diseases	64	48	54	52	36	49	62	47	6.9
Kinetoplastids	75	55	60	33	25	23	22	35	5.2
Helminths (worms & flukes)	12	30	25	23	31	27	33	30	4.4
Dengue	2.3	3.3	3.4	4.9	7.5	11	21	26	3.8
Ebola								12	1.8
Salmonella infections	0.1	1.1	4.0	7.7	10	13	15	11	1.7
Bacterial pneumonia & meningitis	7.0	31	26	50	39	52	27	7.7	1.1
Buruli ulcer	-	0.2	0.3	2.0	2.7	3.1	2.8	3.5	0.5
Leprosy	0.8	1.2	1.1	2.8	1.7	2.3	2.0	1.2	0.2
Trachoma	1.5	-	-	-	0.2	0.6	0.5	0.3	<0.1
Hepatitis C (genotypes 4,5 & 6)							0.1	0.1	<0.1
Cryptococcal meningitis							0.3	<0.1	<0.1
Rheumatic fever	-	0.1	0.2	0.2	-	-	-	-	-
Leptospirosis							<0.1	-	-
Platform technologies	2.3	9.3	17	15	6.9	19	15	11	1.6
<i>Adjuvants and immunomodulators</i>	-	1.5	2.5	5.6	3.8	9.3	4.9	5.0	0.7
<i>General diagnostic platforms</i>	2.3	3.1	7.8	4.1	1.6	9.2	8.2	3.8	0.6
<i>Delivery technologies and devices</i>	0.1	4.7	6.3	5.0	1.4	0.7	1.6	2.4	0.4
Core funding of a multi-disease R&D organisation	15	11	6.3	6.7	5.7	46	46	24	3.6
Unspecified disease	3.7	20	8.6	7.4	3.2	2.3	11	12	1.8
<b>Total philanthropic funding</b>	<b>610</b>	<b>798</b>	<b>721</b>	<b>634</b>	<b>640</b>	<b>702</b>	<b>708</b>	<b>678</b>	<b>100</b>

- No reported funding

■ New disease added to G-FINDER in 2013 or 2014



## PRIVATE SECTOR FUNDERS

The private sector invested \$534m in neglected disease R&D in 2014, which represented 16% of total funding – quite a significant increase from the 12% share the sector contributed in 2013. MNCs provided \$448m (84%), with SMEs accounting for the remaining \$86m (16%).

The increase in industry's share of global funding reflects sharply higher YOY industry investment in neglected disease R&D, which increased by over a quarter in 2014 (up \$98m, 28%). Unlike HIC public funding, this increase was not due entirely to Ebola – even with Ebola excluded, industry investment for neglected diseases increased by \$64m (18%), driven by increased MNC investment in malaria and HIV/AIDS.

### MULTINATIONAL PHARMACEUTICAL COMPANIES

In 2014, almost two-thirds (\$279m, 62%) of MNC investment in neglected disease R&D went to three diseases (malaria, TB and HIV/AIDS). YOY investment from MNCs increased by \$94m (up 27%). However, this was not a reversal of the decline seen in most diseases in 2013, as the 2014 increase was essentially restricted to three diseases: malaria (up \$51m, 64%), HIV/AIDS (up \$31m, a quadrupling of previous investment), and Ebola (which received \$33m, with the majority of this believed to be new investment).

The increase in malaria R&D investment followed an unusually low year in 2013, and was predominantly for drug development (up \$38m, 81%), in large part due to GSK's investment in Phase III trials of tafenoquine for *P. vivax* infection.

Ebola received the fifth largest MNC investment of any of the neglected diseases, receiving 7.3% of total MNC funding, essentially all of which was for vaccine development. The increase in HIV/AIDS investment was also primarily vaccine-related, and placed HIV/AIDS in the top three diseases for MNC funding for the first time since the start of the survey.

In contrast to these increases, MNCs invested less in R&D for TB (down \$10m, -8.7%), diarrhoeal diseases (down \$7.3m, -19%) and kinetoplastids (down \$3.5m, -24%). Although the drop in diarrhoeal disease investment followed a big increase the previous year, the cut to TB represented a continuing decline, with 2014 investment nearly a third lower than in 2010 (down \$47m, -30%). Of the third tier diseases, only rheumatic fever and leprosy received any contributions from MNCs (both around \$0.1m).

**Table 37. MNC R&D funding by disease 2007-2014**

Disease or R&D area	US\$ (millions)								2014 % of total
	2007	2008	2009	2010	2011	2012	2013	2014	
Malaria	85	88	89	121	100	115	80	131	29
Tuberculosis	56	83	122	159	155	138	117	107	24
HIV/AIDS	8.6	23	20	19	16	16	10	41	9.2
Bacterial pneumonia & meningitis	17	36	29	29	36	38	32	34	7.6
Ebola								33	7.3
Diarrhoeal diseases	12	25	37	35	25	29	39	32	7.1
Hepatitis C (genotypes 4, 5 & 6)							27	26	5.7
Kinetoplastids	5.3	1.3	4.1	11	10	19	17	13	2.9
Dengue	4.8	3.4	4.2	6.7	11	8.0	7.0	7.1	1.6
Helminths (worms & flukes)	0.1	4.5	9.3	3.6	2.6	3.4	8.2	6.6	1.5
Salmonella infections	-	1.3	2.0	3.1	5.0	4.1	4.1	3.9	0.9
Rheumatic fever	-	1.1	1.7	-	-	-	-	0.1	<0.1
Leprosy	-	-	-	-	-	-	0.1	0.1	<0.1
Buruli ulcer	-	0.1	-	-	-	-	-	-	-
Trachoma	0.1	0.1	-	-	-	-	-	-	-
Core funding of a multi-disease R&D organisation	-	-	-	-	-	-	2.6	9.5	2.1
Unspecified disease	-	-	-	-	3.7	1.8	8.8	4.5	1.0
<b>Total MNC funding</b>	<b>189</b>	<b>266</b>	<b>317</b>	<b>387</b>	<b>363</b>	<b>371</b>	<b>354</b>	<b>448</b>	<b>100</b>

- No reported funding

■ New disease added to G-FINDER in 2013 or 2014

#### SMALL PHARMACEUTICAL AND BIOTECHNOLOGY FIRMS

SMEs invested \$86m in neglected disease R&D in 2014 (16% of total industry funding). Once again, IDC firms provided the majority of SME investment (\$55m, 64%), with developed country firms contributing the remainder (\$31m, 31%). The apparent increase in SME investment was largely due to increased participation of SMEs in Brazil (who reported investments of \$16m in 2014, compared to zero in 2013), but also reflected a significant increase in typhoid polysaccharide conjugate vaccine investment from one Indian SME.<sup>iv</sup>

Irregular survey participation among SMEs makes analysis of funding trends difficult, but regular survey participants increased their investment in several diseases, including TB (up \$6.1m), salmonella infections (up \$5.8m) and helminths (up \$5.1m), all off relatively low bases. There were no significant drops in SME funding for any diseases. As was the case in 2013, there was no SME investment in any of the third tier diseases in 2014.

SMEs reported investing \$2.5m in Ebola R&D. While this total likely reflects some degree of underreporting due to survey participation, we note that the majority of SME R&D activity for Ebola is funded through external support. SMEs received \$62m in public and philanthropic funding for Ebola R&D in 2014, with the majority of this coming from the US Government (\$52m, 84%).

<sup>iv</sup> SME increases or decreases refer to organisations that participated in both 2013 and 2014, as SME survey participation is inconsistent from year to year

**Table 38. SME R&D funding by disease 2007-2014**

Disease or R&D area	US\$ (millions)								2014 % of total
	2007	2008	2009	2010	2011	2012	2013	2014	
Bacterial pneumonia & meningitis	0.6	21	9.0	7.6	5.9	5.4	18	17	20
Salmonella infections	-	13	1.9	0.2	0.1	0.3	6.0	12	14
Helminths (worms & flukes)	0.8	1.2	0.5	4.0	6.5	0.7	0.1	11	12
Diarrhoeal diseases	3.3	2.3	5.3	0.7	5.1	2.6	6.3	8.8	10
Tuberculosis	17	15	18	19	15	9.1	5.1	8.1	9.4
Malaria	12	11	20	12	8.1	8.1	6.8	7.3	8.5
Kinetoplastids	<0.1	1.8	1.5	1.6	3.9	0.9	0.7	7.1	8.2
HIV/AIDS	13	31	20	15	10	7.6	6.2	6.3	7.3
Ebola								2.5	2.9
Dengue	2.4	0.2	1.2	0.7	0.6	0.5	0.4	0.6	0.7
Buruli ulcer	<0.1	0.2	-	-	-	-	-	-	-
Leprosy	-	-	-	<0.1	0.1	-	-	-	-
Trachoma	-	-	-	2.2	4.5	-	-	-	-
Core funding of a multi-disease R&D organisation	-	-	-	-	-	-	-	0.2	0.2
Unspecified disease	0.7	-	-	-	-	<0.1	1.9	5.7	6.6
<b>Total SME funding</b>	<b>50</b>	<b>97</b>	<b>78</b>	<b>64</b>	<b>60</b>	<b>35</b>	<b>52</b>	<b>86</b>	<b>100</b>

- No reported funding

■ New disease added to G-FINDER in 2013 or 2014

#### IN-KIND CONTRIBUTIONS

In addition to their direct R&D spend, companies conducting neglected disease R&D incur a range of other costs, such as infrastructure costs and costs of capital. These costs have not been included in G-FINDER due to the difficulty of accurately quantifying or allocating them to neglected disease programmes.

Companies also provide in-kind contributions that are specifically targeted to neglected disease R&D, but cannot easily be captured in dollar terms. Although difficult to quantify, these inputs are of substantial value to their recipients and a significant cost to companies.

We note that while some companies have nominated areas where they provide such contributions, others wished to remain anonymous.

**Table 39. Typical industry in-kind contributions 2014**

In-kind contribution	Examples	Some company donors <sup>^</sup>
Transfer of technology & technical expertise to develop, manufacture, register and distribute neglected disease products	<ul style="list-style-type: none"> <li>Identifying scientific obstacles</li> <li>Sharing best practices and developing systems for clinical, technical and regulatory support</li> <li>Developing capacity for pharmacovigilance</li> <li>Donating equipment</li> </ul>	GSK Johnson & Johnson MSD Novartis Otsuka Sanofi
Provision of expertise	<ul style="list-style-type: none"> <li>Supporting clinical trials</li> <li>Collaboration of scientists, sharing trial results and facilitating parallel, concurrent testing</li> <li>Participation on scientific advisory or management boards of external organisations conducting neglected disease R&amp;D</li> <li>Providing expertise in toxicology/ADME and medicinal chemistry</li> <li>Evaluating new compounds proposed by external partners</li> <li>Allowing senior staff to take sabbaticals working with neglected disease groups</li> </ul>	AbbVie Eisai Eli Lilly GSK Johnson & Johnson MSD Novartis Otsuka Sanofi
Teaching and training	<ul style="list-style-type: none"> <li>In-house attachments offered to Developing Country (DC) trainees in medicinal chemistry, clinical trial training etc</li> <li>Providing training courses for DC researchers at academic institutions globally</li> <li>Organising health care provider training in DCs for pharmacovigilance of new treatments</li> <li>Organising conferences and symposia on neglected disease-specific topics</li> </ul>	GSK Johnson & Johnson MSD Novartis Otsuka Sanofi
Intellectual property	<ul style="list-style-type: none"> <li>Access to proprietary research tools and databases</li> <li>Sharing compound libraries with WHO or with researchers who can test and screen them for possible treatments</li> <li>Providing public and non-for-profit groups with information on proprietary compounds they are seeking to develop for a neglected disease indication</li> <li>Forgoing license or providing royalty-free license on co-developed products</li> </ul>	AbbVie Eisai GSK Johnson & Johnson MSD Novartis Pfizer Sanofi
Regulatory assistance	<ul style="list-style-type: none"> <li>Allowing right of reference to confidential dossiers and product registration files to facilitate approval of generic combination products</li> <li>Covering the cost of regulatory filings</li> <li>Providing regulatory expertise to explore optimal registration options for compounds in development</li> </ul>	GSK Johnson & Johnson Novartis Sanofi

<sup>^</sup> Company donors listed do not necessarily engage in all activities listed as examples of in-kind contributions

## FUNDING BY ORGANISATION

Neglected disease R&D funding remained highly concentrated in 2014, with the top 12 funders – including aggregate industry – providing 90% of funding (\$3,038m). Collectively, the US NIH, industry and the Gates Foundation again provided just over two-thirds (70%, \$2,363m) of global R&D funding.

YOY aggregate industry funders provided the greatest increase in investment, with funding up \$98m (28%), due to increased investment in malaria, Ebola and HIV/AIDS. US NIH funding rose by \$26m (2.1%), entirely due to Ebola. Other notable increases came from UK DFID (up \$7.3m, 9.9%), with 2014 being the first full year of its new PDP funding stream, and the Australian NHMRC (up \$4.0m, 15%) following a significant decrease in 2013.

The largest decreases came from the Wellcome Trust, with a drop of \$8.8m (-6.4%) due to cyclical funding patterns for major overseas programmes, and Inserm, down \$7.7m (-12%).

Ebola had a substantial impact on the funding trends of just two of the top 12 funders: the US NIH and Inserm. When Ebola funding is excluded, US NIH funding actually fell by \$37m (-2.9%), partly due to the absence of any in-scope R&D projects within the Therapeutics for Rare and Neglected Diseases (TRND) programme in 2014, as well as reduced funding for platform technologies (down \$16m, -76%) and HIV/AIDS (down \$10m, -1.5%). Without Ebola, the drop in Inserm funding almost doubled, with a \$14m decrease (-23%). Inserm's decreased funding was the result of reductions across all disease areas, with the biggest drops in bacterial pneumonia and meningitis (down \$3.7m, -24%) and TB (down \$3.0m, -48%).

**Table 40. Top neglected disease R&D funders 2014**

Funder	US\$ (millions)								2014 % of total	2007-2014 trend
	2007	2008	2009	2010	2011	2012	2013	2014		
US NIH	1,209	1,229	1,422	1,376	1,344	1,452	1,272	1,298	38	
Aggregate industry	239	363	396	453	424	407	406	534	16	
Gates Foundation	518	690	627	516	512	508	526	531	16	
Wellcome Trust	60	63	69	81	96	149	137	128	3.8	
European Commission	133	144	131	101	118	104	123	126	3.7	
US DOD	84	77	105	74	83	81	95	96	2.8	
UK DFID	48	45	90	98	76	46	74	81	2.4	
USAID	92	96	97	99	93	94	81	77	2.3	
Inserm	1.9	3.5	30	22	42	45	62	54	1.6	
UK MRC	52	55	55	62	54	48	51	50	1.5	
Indian ICMR		24	18	23	22	23	35	33	1.0	
Australian NHMRC	20	24	26	25	35	38	26	30	0.9	
Subtotal of top 12 <sup>^</sup>	2,534	2,846	3,081	2,957	2,911	2,997	2,888	3,038	90	
Total R&D funding	2,844	3,258	3,480	3,320	3,265	3,383	3,273	3,377	100	

<sup>^</sup> Subtotals for 2007–2013 top 12 reflect the top funders for those respective years, not the top 12 for 2014

■ Funding organisation did not participate in the survey for this year