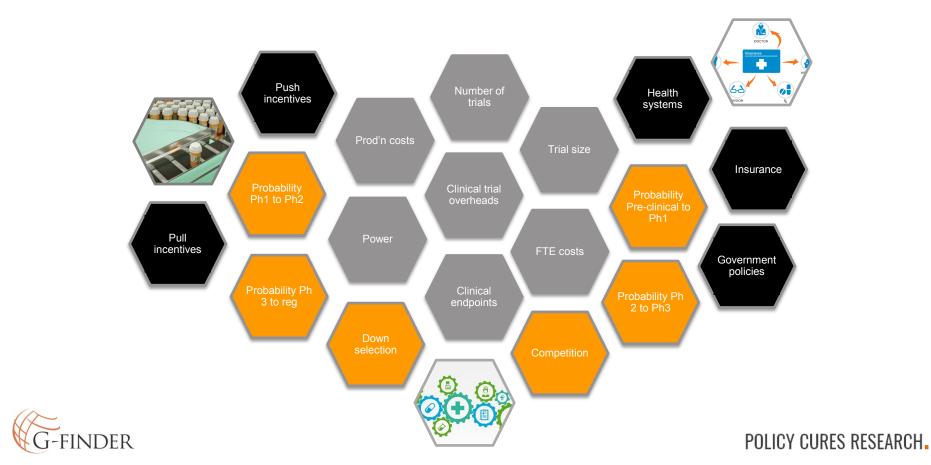
## Neglected disease R&D investment

Anna Doubell

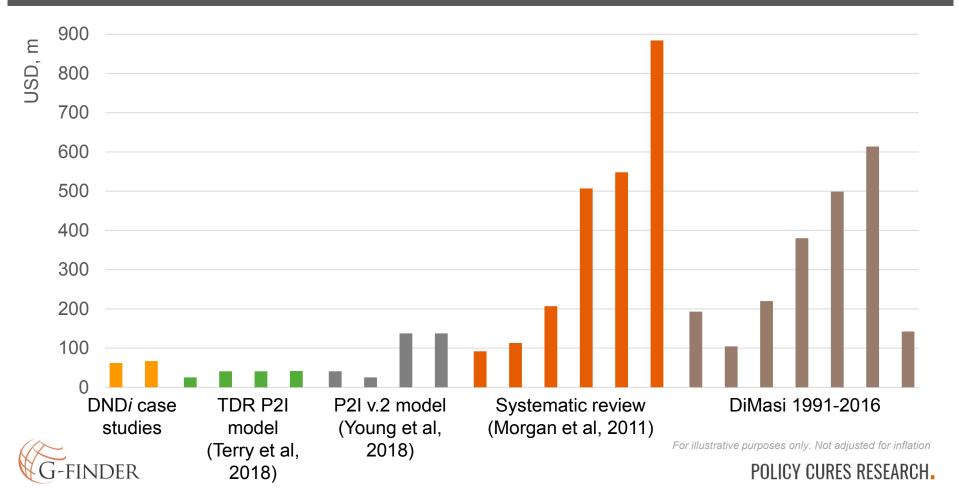
Director of Research, Policy Cures Research



#### Drug developments costs vs price

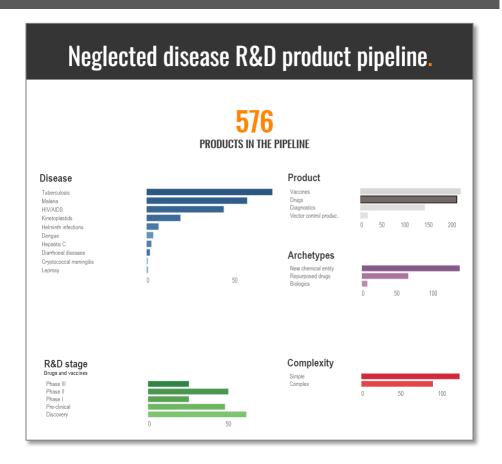


#### Drug R&D cost estimates



#### Policy Cures Research publications

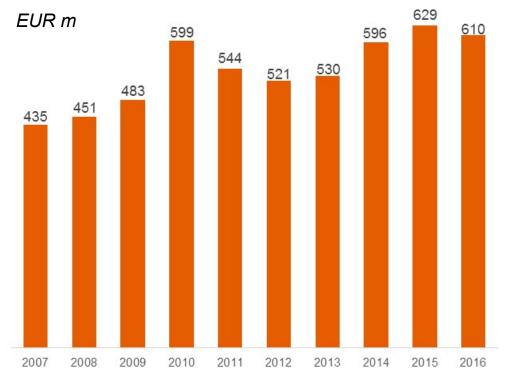






#### Global funding for neglected disease drug R&D

#### Annual global funding of drug R&D



€ 5.4 billion

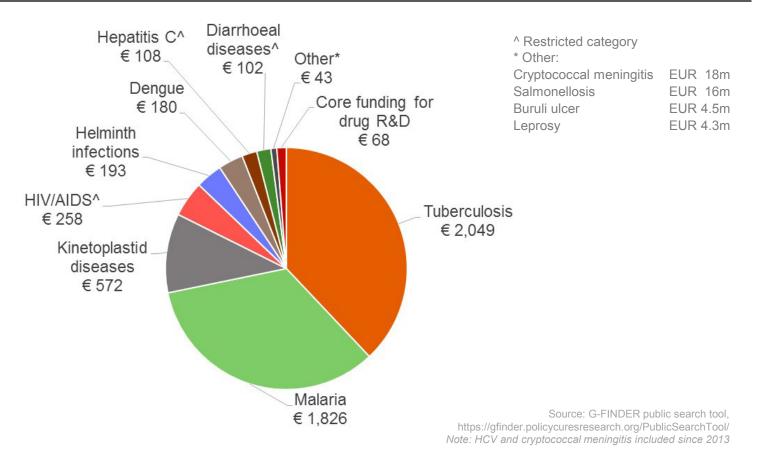
19% of all neglected disease R&D funding

Source: https://gfinder.policycuresresearch.org/PublicSearchTool/

Note: Adjusted for core funding to DNDi

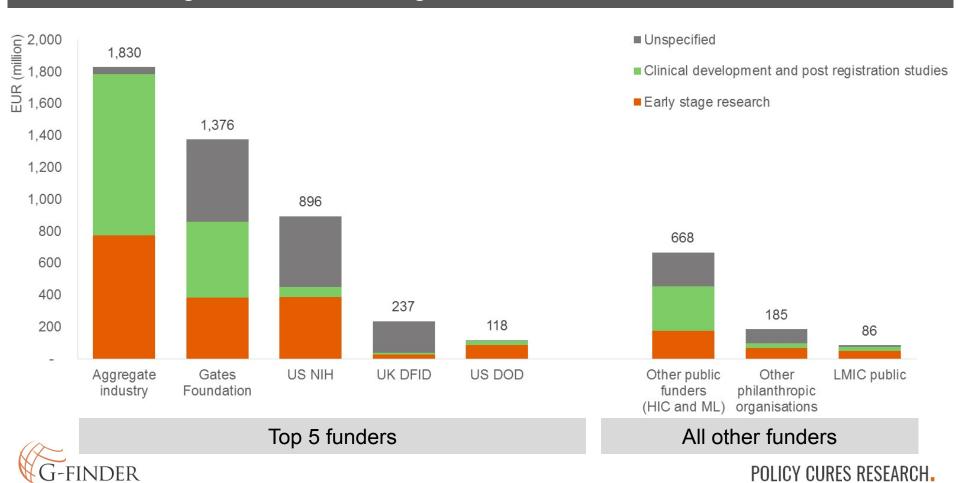


#### 2007-2016 global funding of drug R&D, by disease





#### Funders of neglected disease drug R&D, 2007-2016



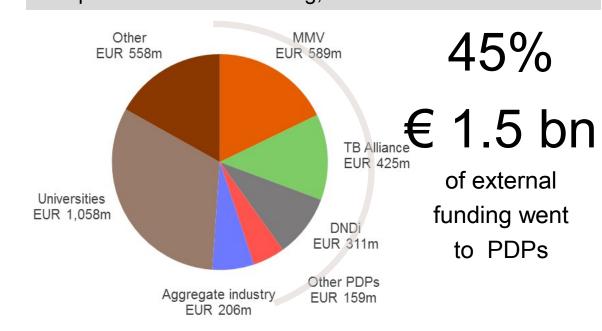
### Where does the money go?

Self-funding 39% EUR 2,092m

External (grant) funding
61%
EUR 3,306m

Recipients of external funding, 2007-2016

- 87% industry
- 11% US government
- National S&T agencies





POLICY CURES RESEARCH.

#### G-FINDER recap

- €5.4bn invested in neglected disease drug R&D over 10 years
- Mostly in malaria and TB
- Funded by industry, Gates
   Foundation, NIH and other HIC government funders
- R&D by industry, PDPs and universities



#### 210 pipeline and registered drugs

60

Discovery	Pre-clinical	Phase I	Phase II	Phase III	Registered
-	1	-	-	-	-
-	3	1	-	-	-
-	1	-	1	-	-
1	2	1	-	2	1
-	-	-	1	1	1
-	2	5	10	11	-
10	4	2	2	1	3
-	1	-	-	-	-
18	20	3	12	2	13
31	7	7	21	4	4
	- - - 1 - - 10 - 18	- 1 - 3 - 1 1 2 2 10 4 - 1 18 20	-     1     -       -     3     1       -     1     -       1     2     1       -     -     -       -     2     5       10     4     2       -     1     -       18     20     3	-     1     -     -       -     3     1     -       -     1     -     1       1     2     1     -       -     -     1       -     2     5     10       10     4     2     2       -     1     -     -       18     20     3     12	-       1       -       -       -         -       3       1       -       -         -       1       -       1       -         1       2       1       -       2         -       -       1       1       1         -       2       5       10       11         10       4       2       2       1         -       1       -       -       -         18       20       3       12       2

19

41



Total

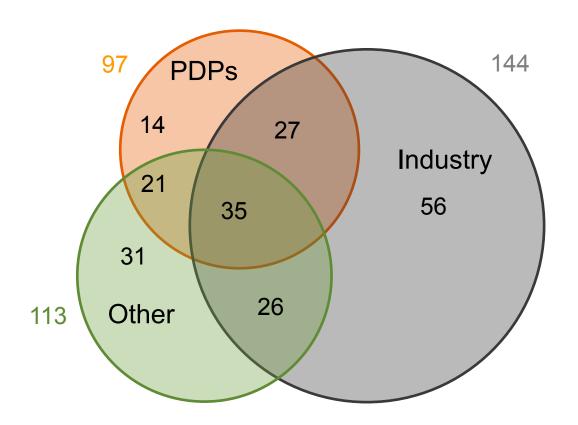
22

Source: www.pipeline.policycuresresearch.org/august2017 and internal data Note: Excludes HIV/AIDS microbicides

21

47

#### Who is involved?





#### 210 pipeline and registered drugs

Archetype		Discovery	Pre-clinical	Phase I	Phase II	Phase III	Registered	Total
Repurposed drug	Simple	13	-	-	24	7	15	59
	Complex	1	9	5	-	-	-	15
New chemical entity	Simple	12	12	7	16	11	5	63
	Complex	32	17	7	6	2	2	66
Biologic	Simple	2	1	-	-	-	-	3
	Complex	-	2	-	1	1	-	4
Total		60	41	19	47	21	22	210



Source: www.pipeline.policycuresresearch.org/august2017
Note: Excludes HIV/AIDS microbicides

#### Recap

#### G-FINDER

- €5.4bn invested in neglected disease drug R&D over 10 years
- Mostly in malaria and TB
- R&D by industry, PDPs and universities

#### Pipeline

- 210 drugs in the pipeline or registered
- Mostly malaria and TB
- Collaboration between industry,
   PDPs and other



#### Conclusions

- Is neglected disease drug research cheaper?
- What are the drivers of difference?
- What are the lessons?



# Thank you

Anna Doubell

