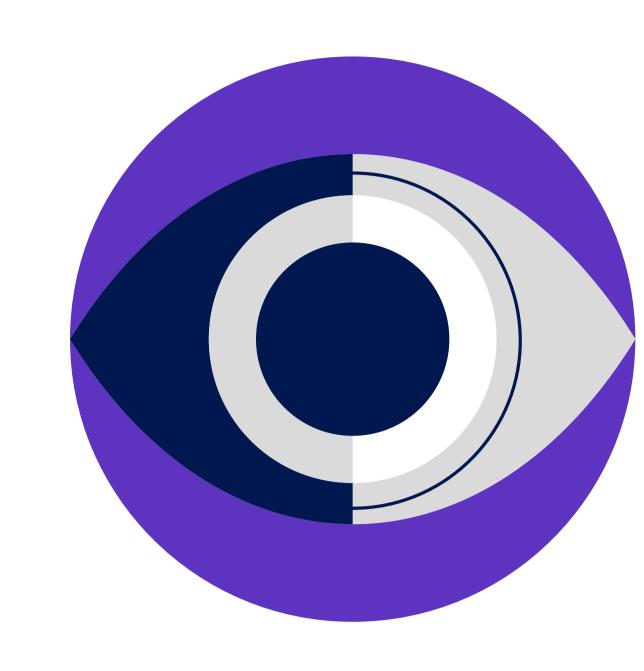
Finding alternate supplies of API sources

Tips to proactively prepare for unexpected supply disruptions





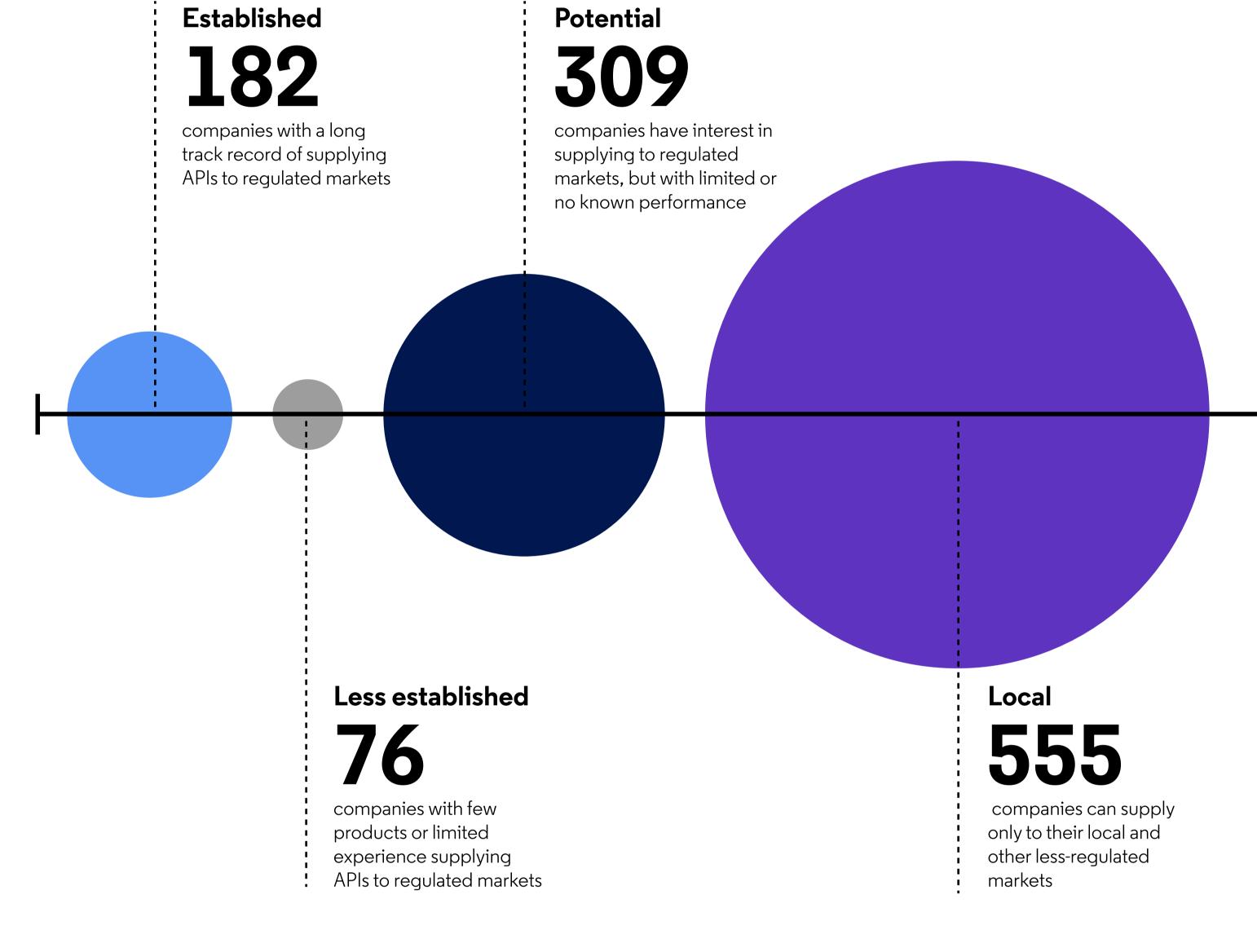
It's impossible to prepare for every worst-case scenario, but a catastrophe – like an environmental disaster or a global pandemic - can occur at any time, completely disrupting your manufacturing processes. Here we review the antibiotic market to

share examples of how you can establish a reliable set of global API suppliers to prepare for the unexpected.

manufacturers supply?

To which markets can antibiotics

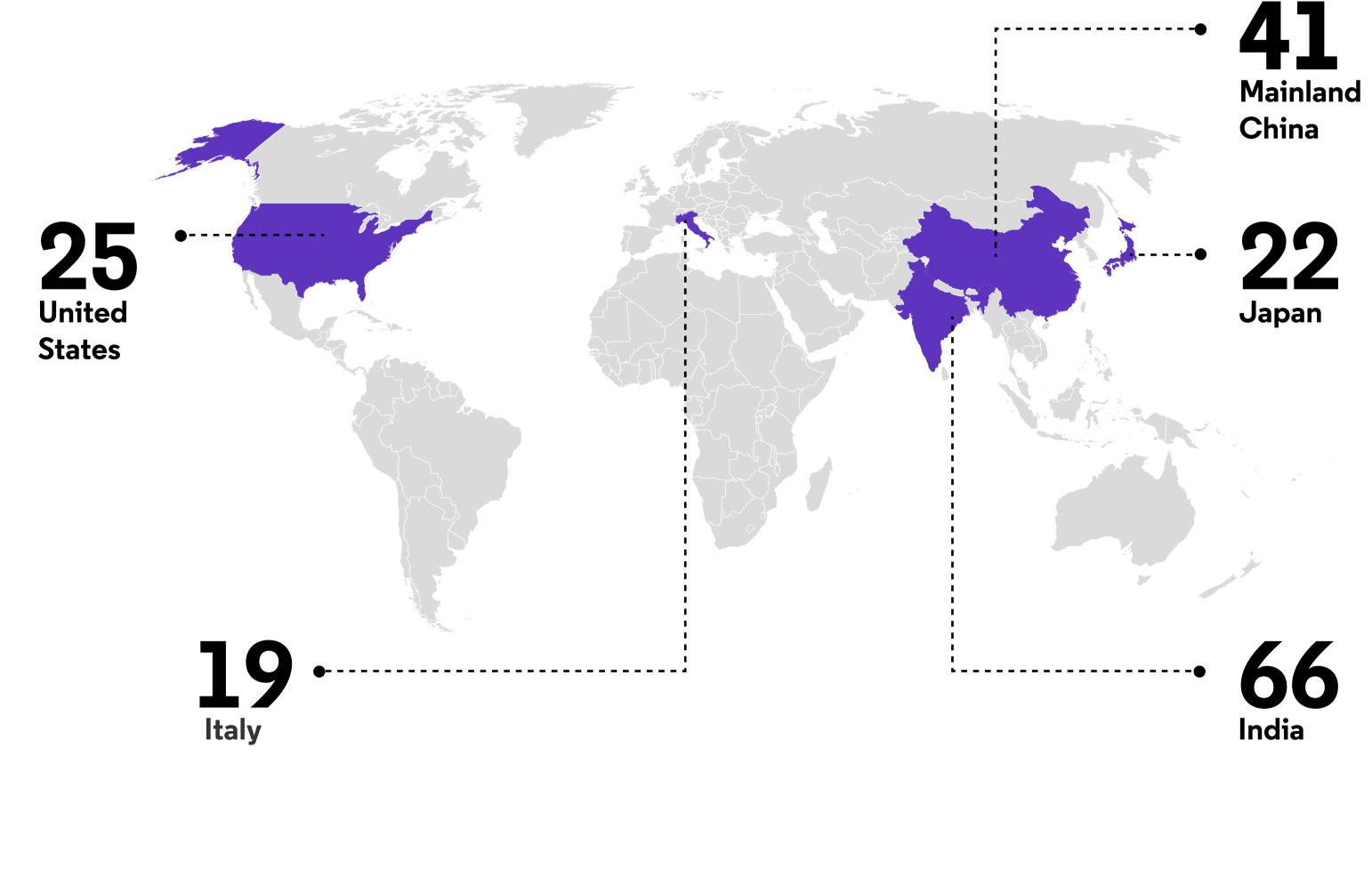
1200 global suppliers



Of the 258 that supply regulated markets established and less established - these manufacturers have corporate locations in:

Where are these

suppliers located?



Are there examples of antibiotics with varying supplier availability? Depending on the API, you may need to explore several different options before establishing a reliable back-up plan. Azithromycin possible manufacturing sites sites capable of producing commercial quantities of the API 11 companies with 19 individual sites that can supply to regulated markets These 19 sites hold:

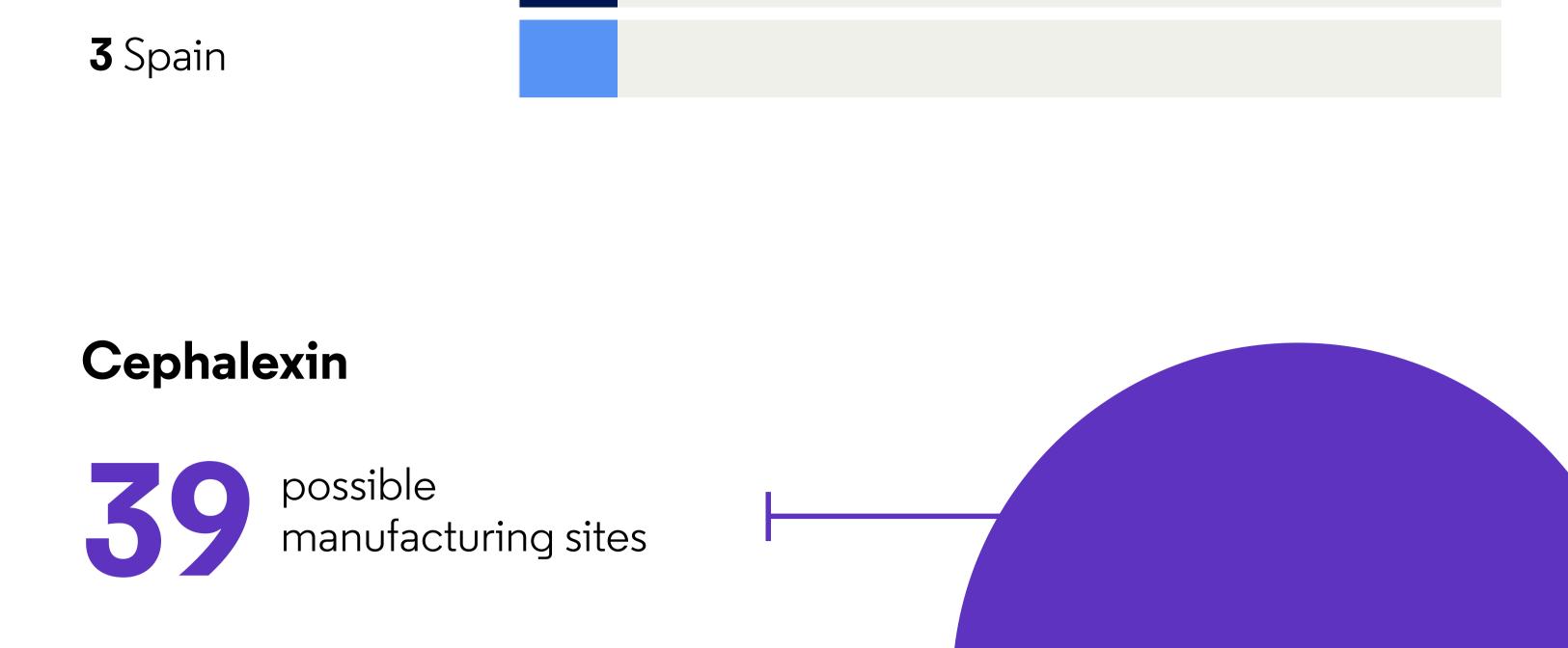
3 Mainland China 1 Croatia

1 Malaysia

9 India 2 Israel

12 active U.S. Drug Master Files

9 valid European Certificates of Suitability



These 13 sites hold: 6 active U.S. Drug Master File and **5 valid** European Certificate of Suitability

13 individual sites that can

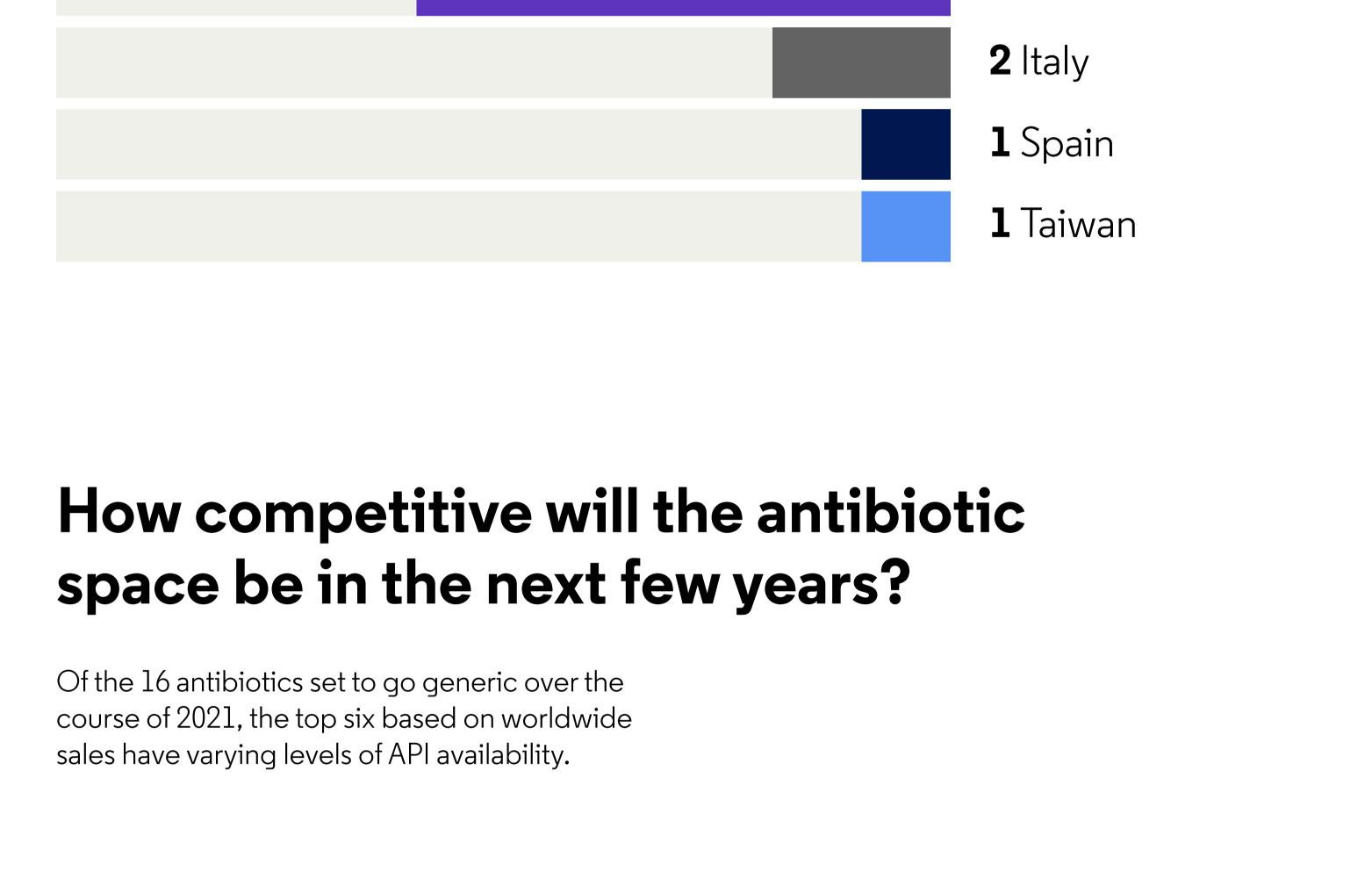
supply to regulated markets

10 companies with

sites capable of

producing commercial

quantities of the API



1 Brazil

6 India

Daptomycin

2 Mainland China

Excessively

available

Colistimethate sodium

and aztreonam lysine

API availability No confirmed Less

Limited sources regulated Regulated sources

Ceftaroline fosamil

How can you

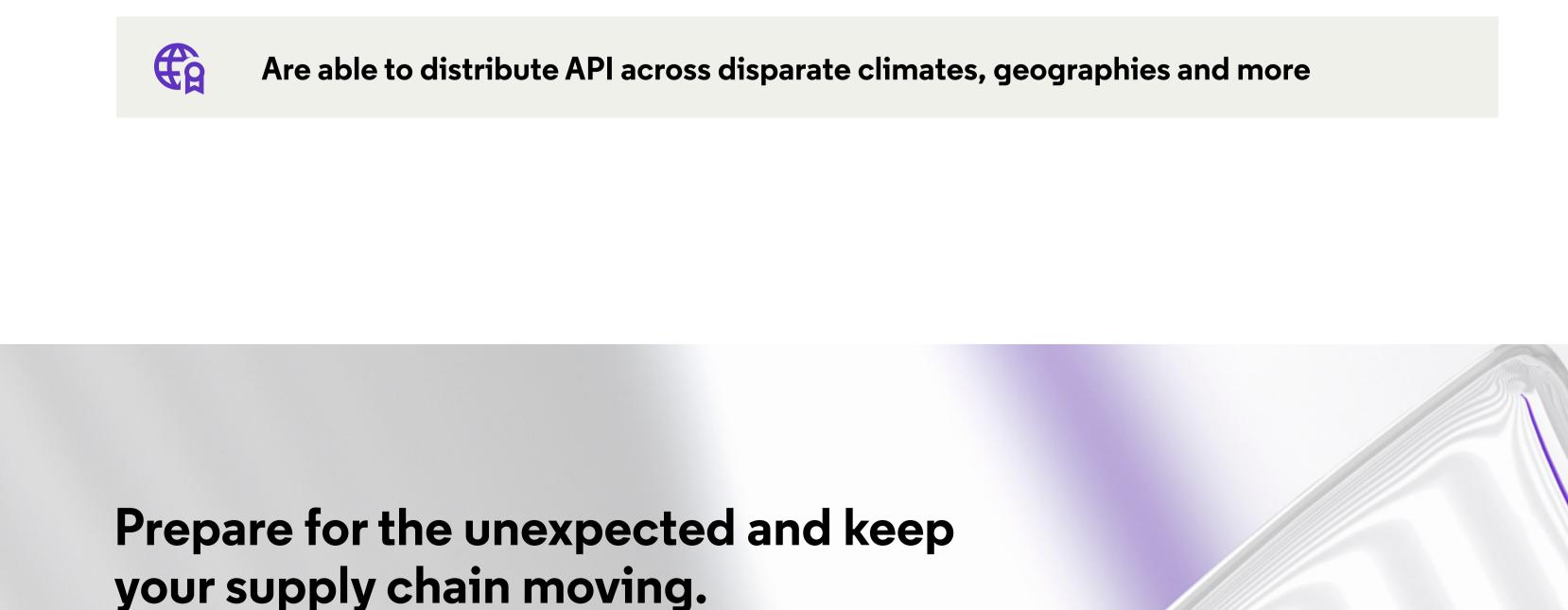


Fidaxomicin and

bromelain

establish a reliable





Have the manufacturing capacity to produce your required volume of API