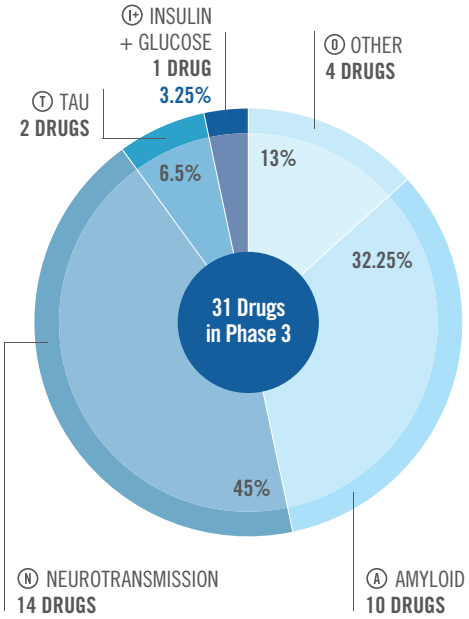
2018 ALZHEIMER'S DRUG PIPELINE

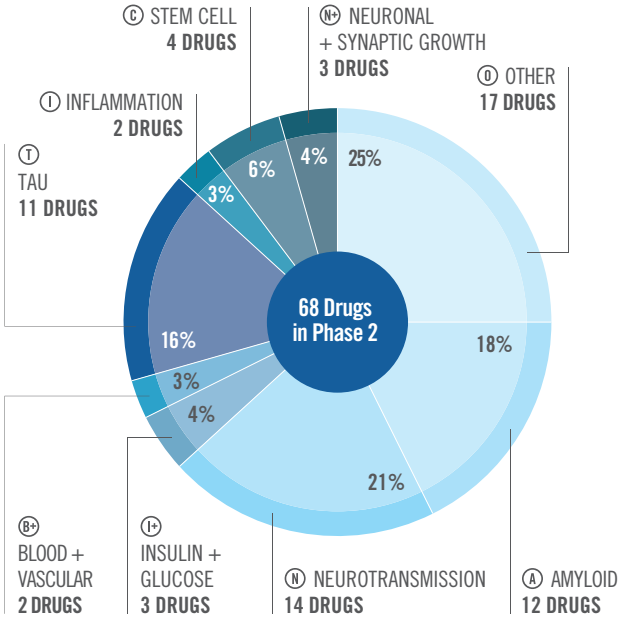
THE CURRENT STATE OF ALZHEIMER'S DRUG DEVELOPMENT

Phase 3 Facts 2018	Percent Change from 2017
Number of Drugs: 31	↓ -3%
Commercial Launch: 25 drugs could reach the market in the next five years	↓ -7%
Number of Symptomatic Drugs: 12	↑ 20%
Number of Disease Modifying Drugs: 19	↓ -14%
Prevention Trials: 7 drugs are in prevention trials	0%
Mechanism of Action: 14 drugs are classified as Neurotransmission	↑ 27%

Phase 2 Facts 2018	Percent Change from 2017
Number of Drugs: 68	↑ 17%
Commercial Launch: 8 drugs could reach the market in the next five years	0%
Number of Symptomatic Drugs: 13	↓ -24%
Number of Disease Modifying Drugs: 55	↑ 34%
Prevention Trials: 2 drugs are in prevention trials	0%
Mechanism of Action: 11 drugs are classified as Tau 12 drugs are classified as Amyloid	↑ 57% ↑ 20%

A Breakdown by Mechanism of Action[1]





Symptomatic vs. Disease-Modifying

A Disease-Modifying drug is one that attempts to alter the underlying pathophysiology of Alzheimer's disease and is being tested with biomarkers.

A Symptomatic drug is one that attempts to lessen the symptomology often associated with Alzheimer's disease, such as agitation, aggression, and insomnia.

Footnotes

1. In this pipeline report, there are eight Phase 2 drugs whose mechanism of action we have reclassified since RA2 last released an update on the state of the Alzheimer's pipeline in the summer of 2017. We made these changes based on input we received from research experts who reviewed the current pipeline in light of new discoveries made about individual drugs within the past year. This year's report reflects the latest scientific developments and thinking and our most recent understanding of the current pipeline. As new discoveries are made, we recognize there may be a need for further updates and revisions.

Methodology

This analysis was constructed through extensive research and interviews, including interviews with company executives about publicly available information, SEC filings, company reports, presentations at medical conferences, and media coverage. Additionally, academic research experts and select RA2 members provided input and review of the analysis. However, the responsibility for the content of this report belongs solely to UsAgainstAlzheimer's, the convener of RA2, and not to any other organization or individual. Information presented in this analysis includes Alzheimer's drugs that are in Phase 2 and Phase 3. This information is subject to change given the nature of clinical trials and drug development. Our intention is to provide regular updates on the status of drug development in Alzheimer's, and we welcome input and corrections.

Prevention Trials

Prevention trials are all trials conducted on pre-symptomatic participants, including those who are healthy and cognitively normal.

Updates

Our intention is to provide regular updates on the status of drug development in Alzheimer's, and we welcome input and corrections.

Contact: prochelle@highlanterngroup.com

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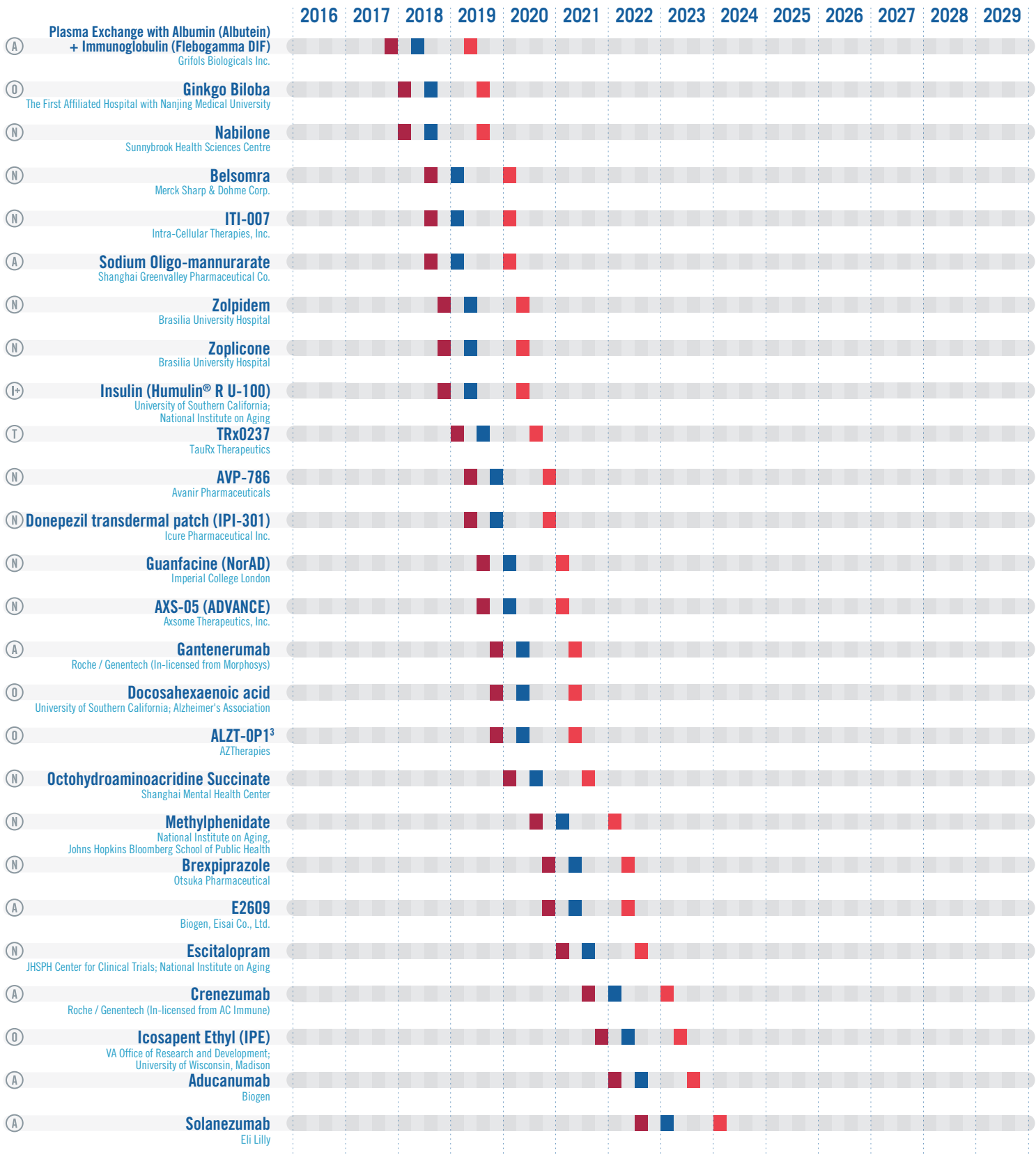
PHASE 3 Alzheimer's Drugs and Estimated Commercial Launch Dates[2]



KEY Estimated Trial Completion | Estimated Regulatory Filing | Estimated Commercial Launch Date

MOA (A) Amyloid (B+) Blood + Vascular (C) Stem Cell (I) Inflammation (I+) Insulin + Glucose (N) Neurotransmission (N+) Neuronal + Synaptic Growth (O) Other (T) Tau

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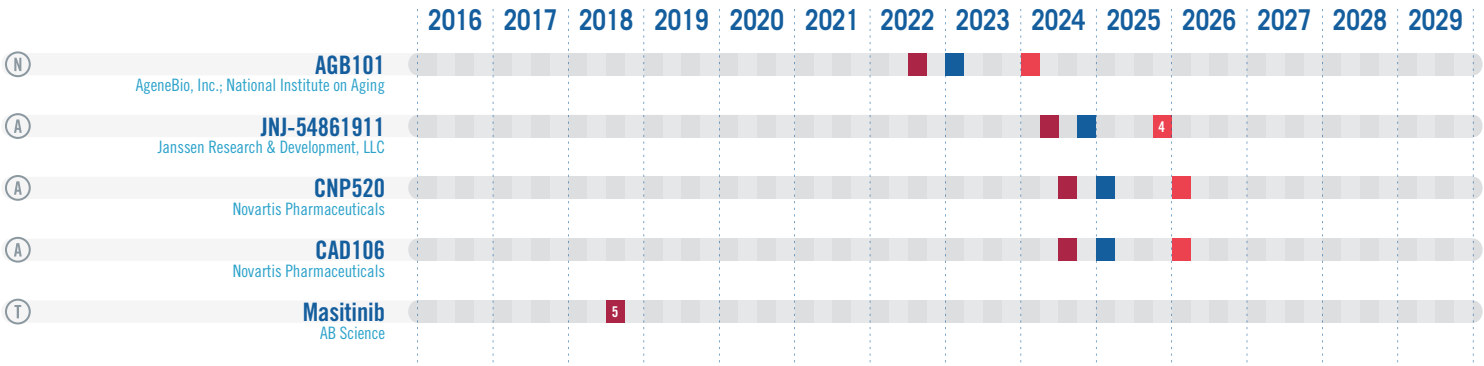
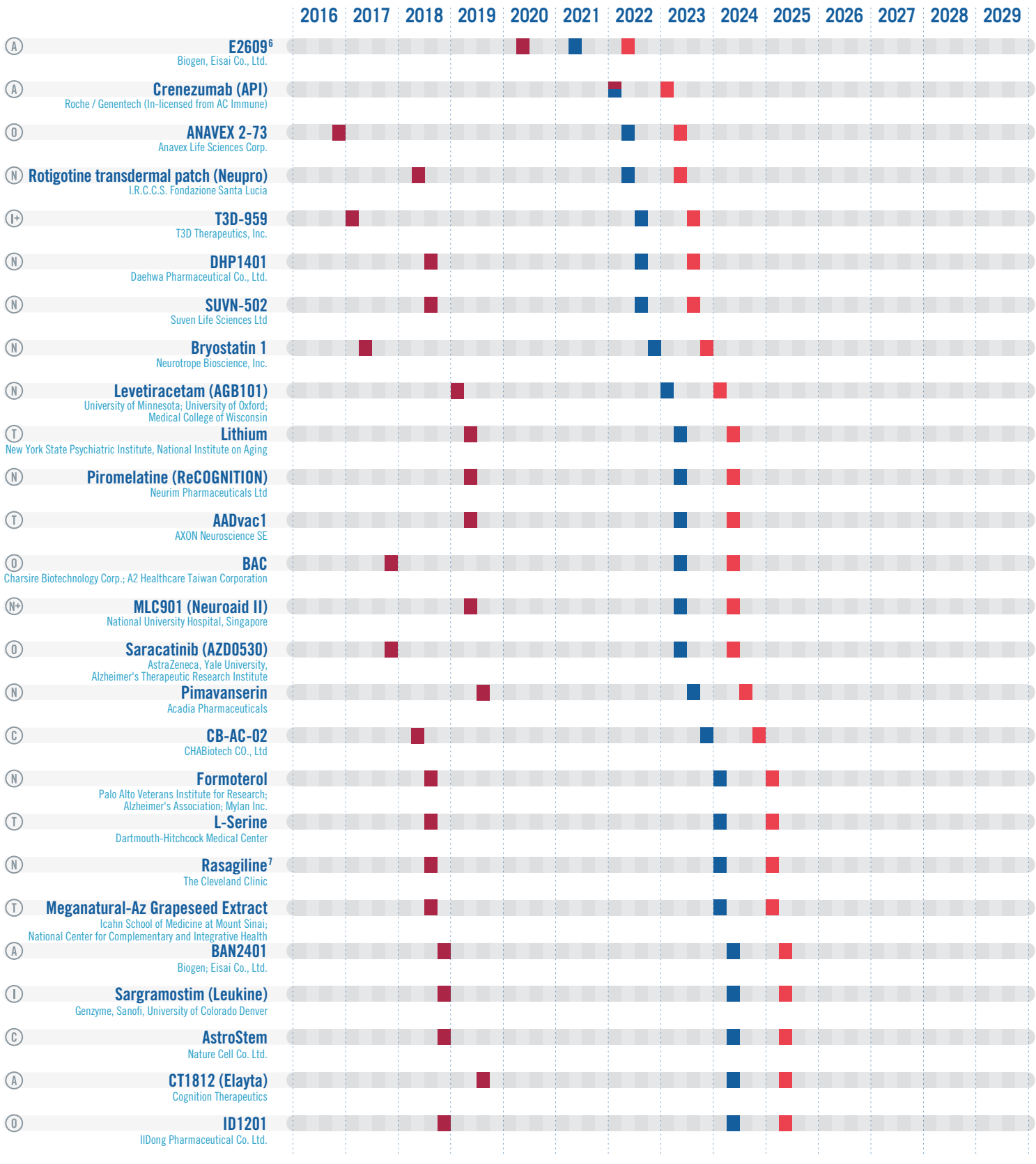


Definitions: For the purposes of this report, Phase 3 drugs are those in either Phase 3 or Phase 2/3 clinical trials.

Phase 3 Formula: LPV to Regulatory Filing: 6 months • Regulatory Filing to Commercial Launch Date: 12 months

2. All drug commercial launch dates in these charts assume trial success in Phase 3.
3. We recognize this drug's mechanism of action could be classified as both Amyloid and Inflammation. For the purposes of this report, we have classified it as Other.
4. This date refers to the anticipated approval date rather than the estimated commercial launch date.
5. Interim analysis of Masitinib.

PHASE 2 Alzheimer's Drugs and Estimated Commercial Launch Dates



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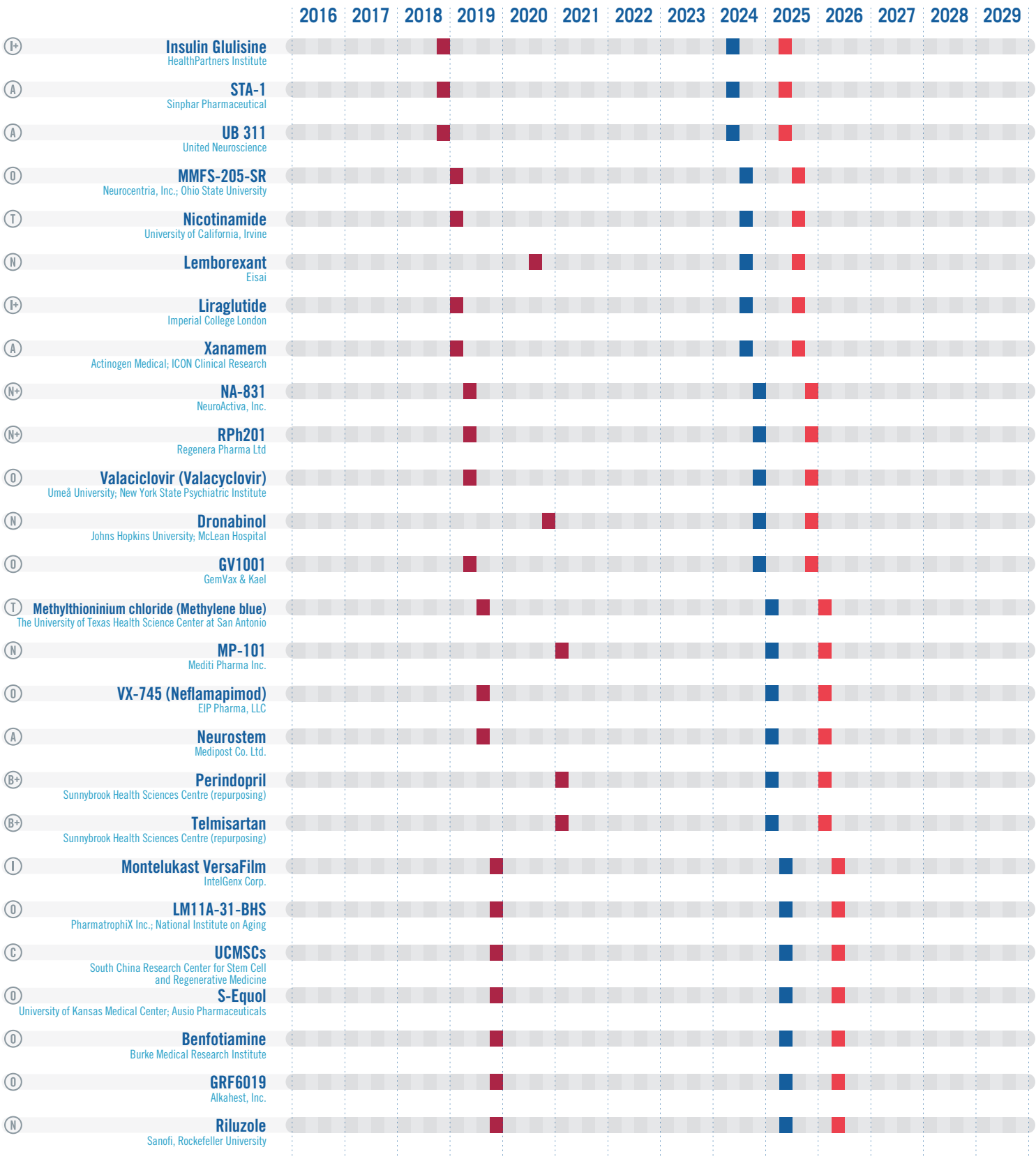

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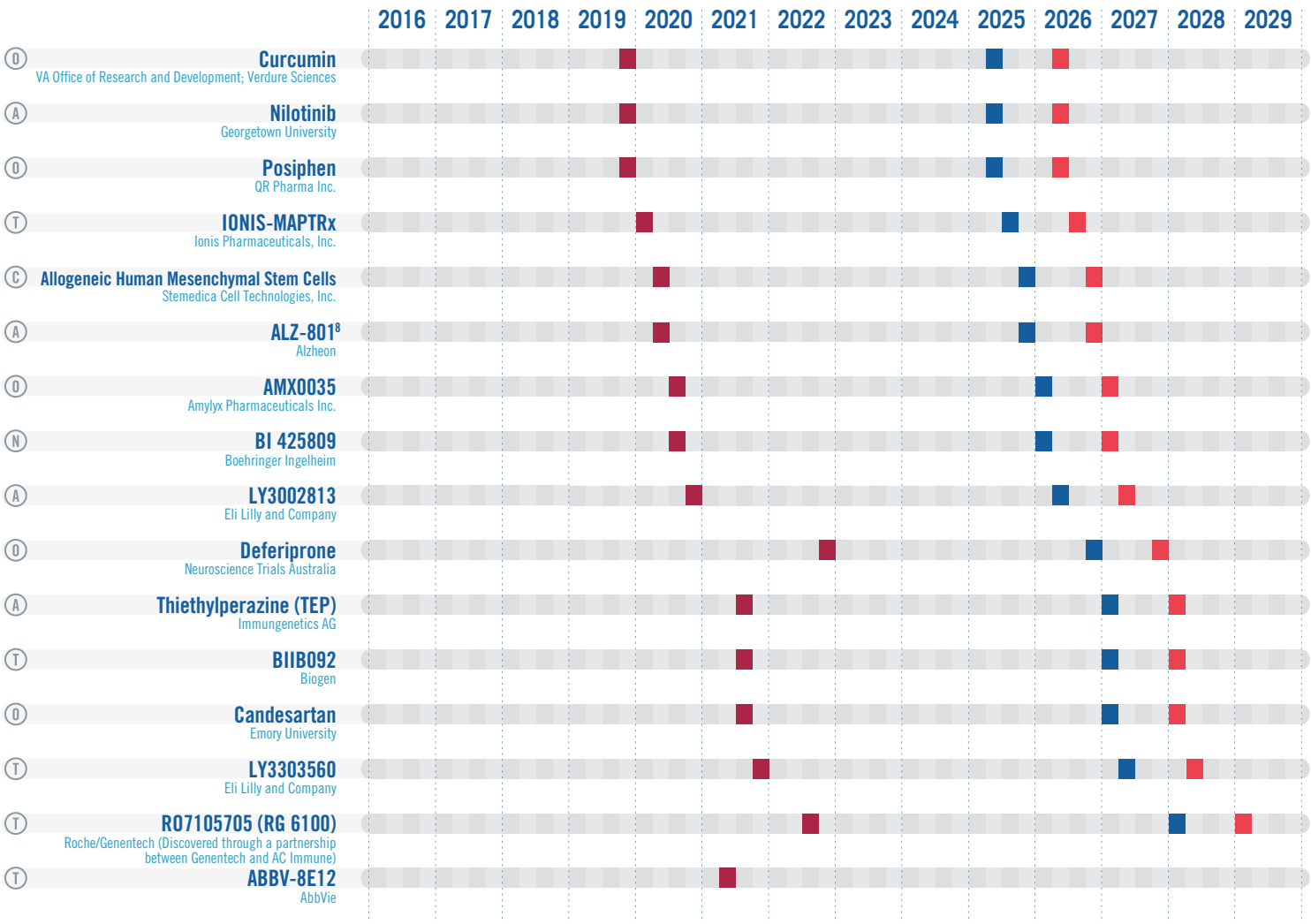

Definitions: For the purposes of this report, Phase 2 drugs are those in either Phase 2 or Phase 1/2 clinical trials.

Phase 2 Formula (Sx Drugs): Phase 2 LPV to Start of Phase 3 Enrollment: 12 months • Phase 3 Enrollment Period + Treatment Period: 24 months + 6 months • LPV to Regulatory Filing: 6 months • Regulatory Filing to Commercial Launch Date: 12 months

Phase 2 Formula (DM Drugs): Phase 2 LPV to Start of Phase 3 Enrollment: 12 months • Phase 3 Enrollment Period + Treatment Period: 24 months + 24 months • LPV to Regulatory Filing: 6 months • Regulatory Filing to Commercial Launch Date: 12 months

A Note About the Phase 2 and 3 Commercial Launch Formulas:
Since RA2's 2017 pipeline report, we have adjusted our commercial launch date formula so that the time between Last Patient Visit and Regulatory Filing is 6 months. This change reflects our latest understanding of the clinical trials process.

6. In some cases, a drug is currently enrolled in both Phase 2 and Phase 3 clinical trials. For these anomalies, RA2 always assumed the Phase 3 regulatory filing and commercial launch date for both trials so that there is consistent information on when a drug may reach the market.
7. No NDA required. Currently on market.
8. The trial completion date, regulatory filing, and commercial launch date are based on an estimate made by RA2.