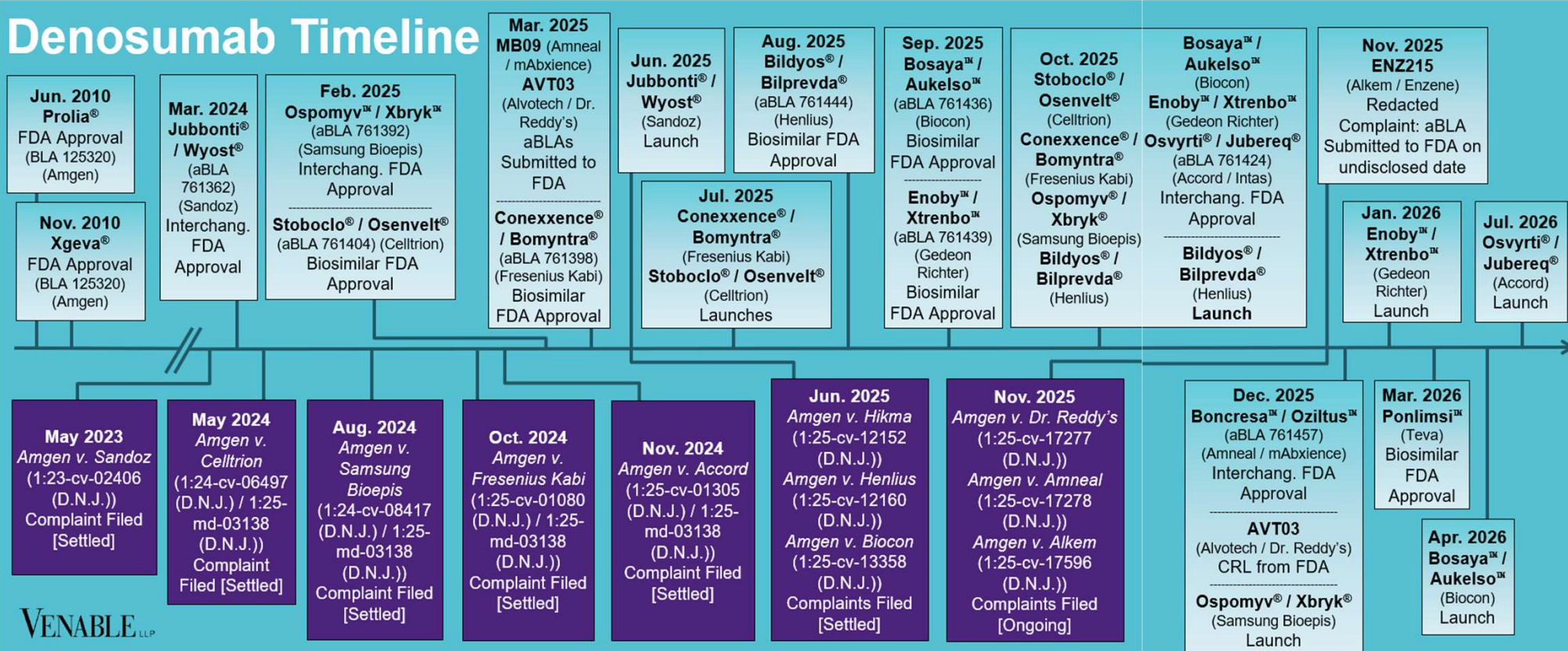


**Technology:** Denosumab is a human monoclonal antibody that binds to the RANKL protein on osteoclasts (cells that break down bone), inhibiting their formation, function, and survival, which regulates bone turnover by slowing bone resorption.

## Denosumab Timeline



Spotlight On:  
**Denosumab**

July 31, 2026

|            | <i>Amgen v. Sandoz</i><br>1:23-cv-02406<br>(D.N.J.)<br>Settled | <i>Amgen v. Celltrion</i><br>1:24-cv-06497<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Samsung Bioepis</i><br>1:24-cv-08417<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Fresenius Kabi</i><br>1:25-cv-01080<br>(D.N.J.) / MDL<br>1:25-md-03138 (D.N.J.)<br>Settled | <i>Amgen v. Accord</i><br>1:25-cv-01305<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Hikma</i><br>1:25-cv-12152<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Shanghai Henlius Biotech</i><br>1:25-cv-12160<br>(D.N.J.) / MDL<br>1:25-md-03138 (D.N.J.)<br>Settled | <i>Amgen v. Biocon</i><br>1:25-cv-13358<br>(D.N.J.) / MDL<br>1:25-md-03138 (D.N.J.)<br>Settled | <i>Amgen v. Dr. Reddy's</i><br>1:25-cv-17277<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Ongoing | <i>Amgen v. Amneal</i><br>1:25-cv-17278<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Ongoing | <i>Amgen v. Alkem</i><br>1:25-cv-17596<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Ongoing |
|------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 7,364,736  | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 7,427,659  |                                                                | x                                                                                                    |                                                                                                            |                                                                                                        |                                                                                                   |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 7,662,930  |                                                                |                                                                                                      |                                                                                                            |                                                                                                        | x                                                                                                 |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   | x                                                                                                |
| 7,888,101  |                                                                |                                                                                                      | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 7,928,205  | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 8,053,236  |                                                                | x                                                                                                    |                                                                                                            | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 8,058,418  | x                                                              |                                                                                                      | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                |                                                                                                                  | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 8,217,153  |                                                                |                                                                                                      |                                                                                                            |                                                                                                        |                                                                                                   |                                                                                                  | x                                                                                                                |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 8,247,210  |                                                                |                                                                                                      | x                                                                                                          |                                                                                                        |                                                                                                   |                                                                                                  |                                                                                                                  | x                                                                                              |                                                                                                        |                                                                                                   | x                                                                                                |
| 8,460,896  |                                                                | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 8,680,248  |                                                                | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 9,012,178  | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                |                                                                                                                  | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 9,133,493  | x                                                              |                                                                                                      |                                                                                                            |                                                                                                        | x                                                                                                 |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 9,228,168  | x                                                              | x                                                                                                    |                                                                                                            | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 9,320,816  | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        | x                                                                                                 |                                                                                                  |
| 9,328,134  | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                |                                                                                                                  | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 9,359,435  | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 9,371,554  |                                                                |                                                                                                      |                                                                                                            |                                                                                                        |                                                                                                   | x                                                                                                |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 9,388,447  |                                                                |                                                                                                      |                                                                                                            |                                                                                                        | x                                                                                                 |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 9,481,901  | x                                                              |                                                                                                      | x                                                                                                          |                                                                                                        |                                                                                                   |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 10,106,829 |                                                                | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 10,167,492 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                |                                                                                                                  | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |

# Spotlight On: Denosumab

July 31, 2026

|            | <i>Amgen v. Sandoz</i><br>1:23-cv-02406<br>(D.N.J.)<br>Settled | <i>Amgen v. Celltrion</i><br>1:24-cv-06497<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Samsung Bioepis</i><br>1:24-cv-08417<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Fresenius Kabi</i><br>1:25-cv-01080<br>(D.N.J.) / MDL<br>1:25-md-03138 (D.N.J.)<br>Settled | <i>Amgen v. Accord</i><br>1:25-cv-01305<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Hikma</i><br>1:25-cv-12152<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Shanghai Henlius Biotech</i><br>1:25-cv-12160<br>(D.N.J.) / MDL<br>1:25-md-03138 (D.N.J.)<br>Settled | <i>Amgen v. Biocon</i><br>1:25-cv-13358<br>(D.N.J.) / MDL<br>1:25-md-03138 (D.N.J.)<br>Settled | <i>Amgen v. Dr. Reddy's</i><br>1:25-cv-17277<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Ongoing | <i>Amgen v. Amneal</i><br>1:25-cv-17278<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Ongoing | <i>Amgen v. Alkem</i><br>1:25-cv-17596<br>(D.N.J.) / MDL<br>1:25-md-03138<br>(D.N.J.)<br>Ongoing |
|------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 10,227,627 |                                                                | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 10,421,987 |                                                                |                                                                                                      | x                                                                                                          |                                                                                                        |                                                                                                   |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 10,513,723 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 10,583,397 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 10,655,156 |                                                                |                                                                                                      | x                                                                                                          | x                                                                                                      | x                                                                                                 |                                                                                                  | x                                                                                                                | x                                                                                              |                                                                                                        | x                                                                                                 | x                                                                                                |
| 10,822,630 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                |                                                                                                                  | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 10,894,972 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 10,907,186 |                                                                |                                                                                                      | x                                                                                                          |                                                                                                        |                                                                                                   |                                                                                                  |                                                                                                                  | x                                                                                              |                                                                                                        |                                                                                                   | x                                                                                                |
| 11,077,404 | x                                                              | x                                                                                                    |                                                                                                            | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 11,098,079 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 11,130,980 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                |                                                                                                                  | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 11,192,919 |                                                                |                                                                                                      |                                                                                                            |                                                                                                        |                                                                                                   | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      |                                                                                                   | x                                                                                                |
| 11,254,963 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 11,292,829 |                                                                |                                                                                                      | x                                                                                                          |                                                                                                        |                                                                                                   |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 11,299,760 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                |                                                                                                                  | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 11,319,568 |                                                                | x                                                                                                    |                                                                                                            | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 11,384,378 |                                                                |                                                                                                      | x                                                                                                          |                                                                                                        |                                                                                                   |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 11,427,848 |                                                                |                                                                                                      | x                                                                                                          |                                                                                                        |                                                                                                   |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 11,434,514 | x                                                              | x                                                                                                    | x                                                                                                          | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 11,459,595 |                                                                | x                                                                                                    |                                                                                                            | x                                                                                                      | x                                                                                                 | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      | x                                                                                                 | x                                                                                                |
| 11,486,883 |                                                                | x                                                                                                    |                                                                                                            |                                                                                                        |                                                                                                   |                                                                                                  |                                                                                                                  |                                                                                                |                                                                                                        |                                                                                                   |                                                                                                  |
| 11,492,372 |                                                                |                                                                                                      |                                                                                                            |                                                                                                        |                                                                                                   | x                                                                                                | x                                                                                                                | x                                                                                              | x                                                                                                      |                                                                                                   | x                                                                                                |

Spotlight On:  
**Denosumab**

July 31, 2026

|            | <i>Amgen v. Sandoz</i><br>1:23-cv-02406<br>(D.N.J.)<br>Settled | <i>Amgen v. Celltrion</i><br>1:24-cv-06497<br>(D.N.J.) / MDL 1:25-md-03138 (D.N.J.)<br>Settled | <i>Amgen v. Samsung Bioepis</i><br>1:24-cv-08417<br>(D.N.J.) / MDL 1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Fresenius Kabi</i><br>1:25-cv-01080<br>(D.N.J.) / MDL 1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Accord</i><br>1:25-cv-01305<br>(D.N.J.) / MDL 1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Hikma</i><br>1:25-cv-12152<br>(D.N.J.) / MDL 1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Shanghai Henlius Biotech</i><br>1:25-cv-12160<br>(D.N.J.) / MDL 1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Biocon</i><br>1:25-cv-13358<br>(D.N.J.) / MDL 1:25-md-03138<br>(D.N.J.)<br>Settled | <i>Amgen v. Dr. Reddy's</i><br>1:25-cv-17277<br>(D.N.J.) / MDL 1:25-md-03138<br>(D.N.J.)<br>Ongoing | <i>Amgen v. Amneal</i><br>1:25-cv-17278<br>(D.N.J.) / MDL 1:25-md-03138<br>(D.N.J.)<br>Ongoing | <i>Amgen v. Alkem</i><br>1:25-cv-17596<br>(D.N.J.) / MDL 1:25-md-03138<br>(D.N.J.)<br>Ongoing |
|------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 11,634,476 |                                                                |                                                                                                | X                                                                                                       |                                                                                                        |                                                                                                |                                                                                               |                                                                                                                  |                                                                                                |                                                                                                     |                                                                                                |                                                                                               |
| 11,685,772 |                                                                |                                                                                                | X                                                                                                       |                                                                                                        |                                                                                                |                                                                                               |                                                                                                                  |                                                                                                |                                                                                                     |                                                                                                |                                                                                               |
| 11,744,950 |                                                                |                                                                                                | X                                                                                                       | X                                                                                                      |                                                                                                |                                                                                               |                                                                                                                  |                                                                                                |                                                                                                     |                                                                                                |                                                                                               |
| 11,786,866 |                                                                |                                                                                                |                                                                                                         | X                                                                                                      |                                                                                                |                                                                                               |                                                                                                                  |                                                                                                |                                                                                                     |                                                                                                |                                                                                               |
| 11,946,085 |                                                                | X                                                                                              | X                                                                                                       | X                                                                                                      | X                                                                                              | X                                                                                             | X                                                                                                                | X                                                                                              | X                                                                                                   | X                                                                                              | X                                                                                             |
| 11,952,605 |                                                                | X                                                                                              |                                                                                                         | X                                                                                                      | X                                                                                              | X                                                                                             | X                                                                                                                | X                                                                                              | X                                                                                                   | X                                                                                              | X                                                                                             |
| 12,084,686 |                                                                |                                                                                                |                                                                                                         | X                                                                                                      | X                                                                                              | X                                                                                             | X                                                                                                                | X                                                                                              | X                                                                                                   | X                                                                                              | X                                                                                             |

