

## Sponsored Abstract

Prolonged Rilonacept Treatment in RHAPSODY Long-Term Extension Provided Persistent Reduction of Pericarditis Recurrence Risk

## Authors:

Massimo Imazio<sup>1</sup>\*, MD, Allan Klein<sup>2</sup>\*, MD, Antonio Abbate<sup>3</sup>, MD, PhD, Michael Arad<sup>4</sup>, MD, Antonio Brucato<sup>5</sup>, MD, Paul Cremer<sup>2</sup>, MD, Eliyazar Gaddam<sup>6</sup>, MD, Antonella Insalaco<sup>7</sup>, MD, Martin LeWinter<sup>8</sup>, MD, Basil S. Lewis<sup>9</sup>, MD, David Lin<sup>10</sup>, MD, Sushil A. Luis<sup>11</sup>, MD, PhD, FRACP, FACC, FASE, Stephen Nicholls<sup>12</sup>, MBBS, PhD, Paul Sutej<sup>13</sup>, MD, Yishay Wasserstrum<sup>4</sup>, Manoj Samant, PhD<sup>14</sup>, Liangxing Zou<sup>14</sup>, PhD, Fang Fang<sup>14</sup>, PhD, and John F. Paolini<sup>14</sup>, MD, PhD, for the RHAPSODY investigators.

\*These authors are co-principal investigators and contributed equally to this work.

<sup>1</sup>Cardiology, Cardiothoracic Department, University Hospital "Santa Maria della Misericordia", ASUFC, Udine, Italy;

<sup>2</sup>Department of Cardiovascular Imaging, Center for the Diagnosis and Treatment of Pericardial Diseases, Heart and Vascular Institute, Cleveland Clinic, Cleveland, Ohio, USA;

<sup>3</sup>Berne Cardiovascular Research Center, University of Virginia, Charlottesville, Virginia, USA; <sup>4</sup>Chaim Sheba Medical Center, Clinical Research Unit, Leviev Heart Center, Ramat Gan, Israel; <sup>5</sup>Department of Biomedical and Clinical Science, University of Milano, Fatebenefratelli Hospital, Milano, Italy;

<sup>6</sup>Affinity Health, Chicago, Illinios, USA;

<sup>7</sup>Division of Rheumatology, Bambino Gesù Children's Hospital, IRCCS, Rome, Italy;

<sup>8</sup>Cardiology Unit, The University of Vermont Medical Center, The University of Vermont, Burlington, Vermont, USA;

<sup>9</sup>Cardiovascular Clinical Research Institute, Lady Davis Carmel Medical Center and Technion-Israel Institute of Technology, Haifa, Israel;

<sup>10</sup>Minneapolis Heart Institute at Abbott Northwestern Hospital, Minneapolis, Minnesota, USA;

<sup>11</sup>Department of Cardiovascular Medicine, Mayo Clinic, Rochester, Minnesota, USA,

<sup>12</sup>MonashHeart, Department of Cardiology, Monash University, Clayton, Victoria, Australia

<sup>13</sup>Northside Hospital, Atlanta, GA, USA;

<sup>14</sup>Kiniksa Pharmaceuticals, Lexington, Massachusetts, USA

## Presenter: Aamer Khan, Pharm. D., MBA\*\*

\*\* Kiniksa Pharmaceuticals, Lexington, Massachusetts, USA

**Introduction:** Rilonacept reduced pericarditis recurrence in the phase 3 trial RHAPSODY. The long-term extension (LTE) enabled further insights into efficacy, safety, and clinical decision making.

Methods: The RHAPSODY run-in (RI) and randomized-withdrawal periods were followed by an LTE that enabled open-label rilonacept treatment up to 24 additional months. A decision at 18 months after the most recent recurrence was based on clinical status at investigator discretion:

1) continue rilonacept on-study, 2) suspend rilonacept for observation or 3) discontinue from the LTE without observation. Endpoints included recurrence and quality of life.

Results: In May 2020, 74 of 75 eligible subjects continued to the LTE; US subjects (n=45) switched to commercial therapy or discontinued in April 2021 (treatment duration from RI baseline [median; maximum] 18; 27 months). Non-US subjects (n=29) completed the LTE in June 2022 (treatment duration from RI baseline [median; maximum] 27; 33 months). Concomitant oral medications during LTE: 22% NSAIDS, 20% colchicine, 0% corticosteroids, 43% none. Inflammation signs (CRP), RP symptoms (PGIPS), and recurrences were low ontreatment. Before the 18-month decision (n=74), there were 3 investigator-assessed recurrences (0.04 per patient-year). At the 18-month decision (n=52), 64% (n=33) continued rilonacept onstudy, 15% (n=8) suspended rilonacept for observation, and 21% (n=11) discontinued the study without observation, of whom 7 switched to commercial rilonacept. There was a 75% recurrence rate (n=6/8) in the off-treatment observation group (median time to event 11.8 [3.7, Not-Estimable (NE)] weeks) but only 1 recurrence in subjects on rilonacept (time to event NE [too few events]) associated with a 4-week interruption; HR 0.018, p<0.0001; Figure 1.

Conclusion: Continued rilonacept treatment resulted in continued treatment response, whereas treatment suspension at 18 months may be associated with pericarditis recurrence.

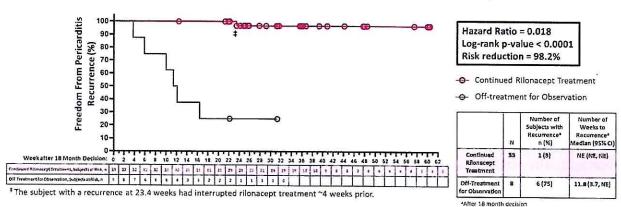


Figure 1. Continued rilonacept treatment beyond 18 months resulted in continued treatment response