

SUPPLEMENTARY MATERIAL

Comparative Efficacy of Talquetamab vs. Current Treatments in the LocoMMotion and MoMMent Studies in Patients with Triple-Class–Exposed Relapsed/Refractory Multiple Myeloma

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Appendix S1 Data sources and study designs

Data Sources

Patients Treated With Talquetamab in MonumentAL-1

MonumentAL-1 is an ongoing, first-in-human, open-label, single-arm phase I/II clinical trial studying the safety and efficacy of talquetamab in adult patients with triple-class–exposed relapsed/refractory multiple myeloma (RRMM) [1]. Eligible patients must have received a diagnosis of MM under International Myeloma Working Group (IMWG) diagnostic criteria. In phase II, patients were required to have previous exposure to ≥ 1 proteasome inhibitor (PI), ≥ 1 immunomodulatory inhibitor (IMiD), and ≥ 1 anti-CD38 monoclonal antibody, as well as an Eastern Cooperative Oncology group performance status score of 0 to 2. This study consists of three distinct parts, registered as two unique clinical trials: parts 1 and 2 represent the phase I portion of the study (NCT03399799) and part 3 represents the phase II portion of the study (NCT04634552). The phase I portion assessed dose escalation and expansion of talquetamab, whereas the phase II portion examined efficacy and safety at the recommended phase II doses (RP2Ds) identified in phase I. Patients in phase I were treated with intravenous or subcutaneous (SC) talquetamab, with doses ranging from 0.5 to 180 $\mu\text{g}/\text{kg}$ and 5 to 1600 $\mu\text{g}/\text{kg}$, respectively [1]. The RP2Ds were determined to be SC talquetamab 0.4 mg/kg QW (preceded by step-up doses of 0.01 and 0.06 mg/kg) and 0.8 mg/kg Q2W (preceded by step-up doses of 0.01, 0.06, and 0.3 mg/kg).

Patients Receiving Treatments From Real-world Clinical Practice in LocoMMotion

LocoMMotion (NCT04035226) is the first prospective, multinational, non-interventional study assessing real-world physician's choice of therapy (RWPC) in patients with triple-class–exposed RRMM and has been described elsewhere in detail [2]. A total of 76 centers from nine European countries and the United States enrolled a total of 248 patients between August 2019 and October 2020. Response and progression events were assessed by a response review committee. The data used for analyses in this study included final data from LocoMMotion as of October 27, 2022, with a median duration of patient follow-up of 26.4 months.

Patients Receiving Treatments From Real-World Clinical Practice in MoMMent

MoMMent (NCT05160584) is a prospective, multinational, non-interventional study assessing RWPC in patients with triple-class–exposed RRMM and was designed to be identical to LocoMMotion and to continue documenting current RWPC and associated outcomes. The study consists of two periods. Period 1 enrolled 54 participants who have received a PI, IMiD, and anti-CD38 monoclonal antibody to further complement the LocoMMotion cohort. Period 2 is expected to enroll participants who have received a PI, IMiD, and anti-CD38 monoclonal antibody, as well as BCMA-targeted therapy to document clinical practice in a patient population exposed to BCMA-targeted therapy. Participants were enrolled in 51 sites across Europe between November 2021 and July 2022; follow-up is ongoing. The data used for analyses in this study included data from MoMMent, with a clinical cutoff of March 13, 2023, and a median duration of follow-up of 9.3 months.

Analysis Populations and Design

The intention-to-treat (ITT) populations in MonumentAL-1 and the RWPC cohort were considered analogous and were compared in the current analyses. The ITT population in MonumentAL-1 included all participants who were treated with talquetamab, with the index date defined as the date of first dose. The ITT population in the RWPC cohort consisted of all participants who satisfied the eligibility criteria for MonumentAL-1, with the index date defined as day 1 cycle 1 of the real-world treatment.

Appendix S2 Sensitivity analyses results for ORR, \geq CR, and \geq VGPR for talquetamab 0.4 mg/kg QW and talquetamab 0.8 mg/kg Q2W vs. RWPC

| Outcome/ Analysis ^a | Talquetamab 0.4 mg/kg QW | | | Talquetamab 0.8 mg/kg Q2W | | |
|-----------------------------------|--------------------------|------------------------|-----------------------------|---------------------------|------------------------|-----------------------------|
| | RR (95% CI) | OR (95% CI) | <i>p</i> value ^b | RR (95% CI) | OR (95% CI) | <i>p</i> value ^b |
| ORR | | | | | | |
| ATT all variables | 2.50 (1.79–3.47) | 6.78 (4.14–11.11) | < 0.0001 | 2.14 (1.56–2.94) | 5.03 (3.12–8.11) | < 0.0001 |
| Multivariable regression | 2.27 (1.61–3.20) | 9.09 (4.83–17.11) | < 0.0001 | 2.06 (1.48–2.88) | 8.03 (4.22–15.28) | < 0.0001 |
| ATO | 2.27 (1.37–3.74) | 6.52 (3.00–14.14) | 0.0014 | 2.11 (1.28–3.47) | 5.26 (2.47–11.19) | 0.0034 |
| ATE | 2.22 (1.61–3.06) | 5.59 (3.44–9.07) | < 0.0001 | 2.28 (1.66–3.14) | 6.09 (3.74–9.93) | < 0.0001 |
| PS matching | 2.31 (1.53–3.50) | 7.17 (3.73–13.77) | < 0.0001 | 2.09 (1.38–3.17) | 4.99 (2.69–9.25) | 0.0005 |
| \geq VGPR | | | | | | |
| ATT all variables | 4.52 (2.86–7.15) | 9.69 (5.59–16.77) | < 0.0001 | 4.51 (2.87–7.09) | 9.92 (5.75–17.12) | < 0.0001 |
| Multivariable regression | 4.51 (2.83–7.19) | 17.99 (8.77–36.89) | < 0.0001 | 4.15 (2.64–6.54) | 15.06 (7.64–29.65) | < 0.0001 |
| ATO | 4.33 (2.15–8.70) | 10.44 (4.45–24.47) | < 0.0001 | 4.13 (2.07–8.24) | 9.72 (4.18–22.59) | < 0.0001 |
| ATE | 4.27 (2.75–6.63) | 9.48 (5.54–16.23) | < 0.0001 | 4.54 (2.92–7.06) | 10.84 (6.30–18.64) | < 0.0001 |
| PS matching | 4.77 (2.62–8.67) | 12.07 (5.85–24.91) | < 0.0001 | 4.21 (2.35–7.55) | 9.48 (4.70–19.14) | < 0.0001 |
| \geq CR | | | | | | |
| ATT all variables | 35.98 (7.63–169.77) | 53.66 (11.15–258.27) | < 0.0001 | 68.73 (9.46–499.06) | 111.34 (15.08–821.81) | < 0.0001 |
| Multivariable regression | 70.66 (9.52–524.59) | 218.47 (25.46–1874.68) | < 0.0001 | 80.28 (10.94–589.32) | 192.71 (24.48–1517.11) | < 0.0001 |
| ATO | 61.54 (2.52–1505.84) | 96.02 (3.83–2406.18) | 0.0116 | 75.23 (2.77–2045.87) | 127.84 (4.59–3561.86) | 0.0104 |
| ATE | 69.23 (8.56–559.88) | 105.84 (12.89–868.95) | < 0.0001 | 86.77 (10.26–733.85) | 148.54 (17.29–1276.05) | < 0.0001 |
| PS matching | NE | NE | NE | NE | NE | NE |

ATE average treatment effect, ATO average treatment effect in the overlap, ATT average treatment effect in the treated, \geq CR complete response or better, NE not evaluable, OR odds ratio, ORR overall response rate, PS propensity score, Q2W every other week, QW once weekly, RR response-rate ratio, RWPC real-world physician's choice of therapy, \geq VGPR very good partial response or better

^aPropensity score matching (caliper = 0.2)

^b*p* values refer to RR

The total number of patients assessed for the 0.4 mg/kg cohort: multivariable regression (MonumentAL-1, *N* = 143; RWPC, *N* = 177), ATO (MonumentAL-1 and RWPC, *N* = 65), ATE (MonumentAL-1, *N* = 144; RWPC, *N* = 177), and PS matching (MonumentAL-1 and RWPC, *N* = 94)

The total number of patients assessed for the 0.8 mg/kg Q2W cohort: multivariable regression (MonumentAL-1, *N* = 145; RWPC, *N* = 177), ATO (MonumentAL-1 and RWPC, *N* = 65), ATE (MonumentAL-1, *N* = 145; RWPC, *N* = 177), and PS matching (MonumentAL-1 and RWPC, *N* = 95)

Appendix S3 Sensitivity analyses results for DOR, PFS, TTNT, and OS for talquetamab 0.4 mg/kg QW and talquetamab 0.8 mg/kg Q2W vs. RWPC

| Outcome/ Analysis ^a | Talquetamab 0.4 mg/kg QW | | Talquetamab 0.8 mg/kg Q2W | |
|-----------------------------------|--------------------------|----------|---------------------------|----------|
| | HR (95% CI) | p value | HR (95% CI) | p value |
| DOR | | | | |
| ATT all variables | 0.77 (0.40–1.47) | 0.4258 | 0.37 (0.20–0.67) | 0.0012 |
| Multivariable regression | 0.71 (0.43–1.18) | 0.1851 | 0.31 (0.16–0.58) | 0.0003 |
| ATO | 0.81 (0.53–1.24) | 0.3284 | 0.39 (0.22–0.67) | 0.0007 |
| ATE | 0.82 (0.53–1.26) | 0.3601 | 0.39 (0.22–0.69) | 0.0013 |
| PS matching | 1.05 (0.62–1.80) | 0.8505 | 0.31 (0.17–0.56) | 0.0001 |
| PFS | | | | |
| ATT all variables | 0.53 (0.33–0.84) | 0.0063 | 0.42 (0.29–0.63) | < 0.0001 |
| Multivariable regression | 0.55 (0.41–0.75) | 0.0001 | 0.38 (0.27–0.54) | < 0.0001 |
| ATO | 0.59 (0.44–0.79) | 0.0004 | 0.42 (0.30–0.59) | < 0.0001 |
| ATE | 0.63 (0.45–0.87) | 0.0050 | 0.39 (0.27–0.56) | < 0.0001 |
| PS matching | 0.60 (0.42–0.86) | 0.0048 | 0.42 (0.28–0.62) | < 0.0001 |
| TTNT | | | | |
| ATT all variables | 0.56 (0.38–0.81) | 0.0025 | 0.45 (0.31–0.65) | < 0.0001 |
| Multivariable regression | 0.49 (0.37–0.66) | < 0.0001 | 0.39 (0.28–0.55) | < 0.0001 |
| ATO | 0.52 (0.40–0.69) | < 0.0001 | 0.41 (0.30–0.57) | < 0.0001 |
| ATE | 0.56 (0.41–0.77) | 0.0004 | 0.39 (0.28–0.54) | < 0.0001 |
| PS matching | 0.53 (0.38–0.75) | 0.0003 | 0.44 (0.31–0.63) | < 0.0001 |
| OS | | | | |
| ATT all variables | 0.35 (0.22–0.54) | < 0.0001 | 0.37 (0.22–0.62) | 0.0001 |
| Multivariable regression | 0.42 (0.29–0.63) | < 0.0001 | 0.44 (0.28–0.69) | 0.0004 |
| ATO | 0.46 (0.32–0.67) | < 0.0001 | 0.45 (0.29–0.70) | 0.0005 |
| ATE | 0.52 (0.33–0.81) | 0.0038 | 0.40 (0.25–0.64) | 0.0001 |
| PS matching | 0.45 (0.29–0.70) | 0.0003 | 0.44 (0.27–0.71) | 0.0010 |

ATE average treatment effect, ATO average treatment effect in the overlap, ATT average treatment effect in the treated, DOR duration of response, HR hazard ratio, OS overall survival, PFS progression-free survival, PS propensity score, Q2W every other week, QW once weekly, RWPC real-world physician's choice of therapy, TTNT time to next treatment

^aPropensity score matching (caliper = 0.2)

For DOR, the total number of patients assessed for the 0.4 mg/kg QW cohort:

multivariable regression (MonumenTAL-1, N = 106; RWPC, N = 66), ATO (MonumenTAL-1, N = 50; RWPC, N = 22), ATE (MonumenTAL-1, N = 105; RWPC, N = 59), and PS matching (MonumenTAL-1, N = 74; RWPC, N = 32)

The total number of patients assessed for the 0.8 mg/kg Q2W cohort:

multivariable regression (MonumenTAL-1, N = 104; RWPC, N = 66), ATO (MonumenTAL-1, N = 48; RWPC, N = 23), ATE (MonumenTAL-1, N = 109; RWPC, N = 58), and PS matching (MonumenTAL-1, N = 69; RWPC, N = 33)

For PFS, TTNT, and OS, the total number of patients assessed for the 0.4 mg/kg QW cohort: multivariable regression (MonumenTAL-1, N = 143; RWPC, N = 177), ATO (MonumenTAL-1 and RWPC, N = 65), ATE (MonumenTAL-1, N = 144; RWPC, N = 177), and PS matching (MonumenTAL-1 and RWPC, N = 94)

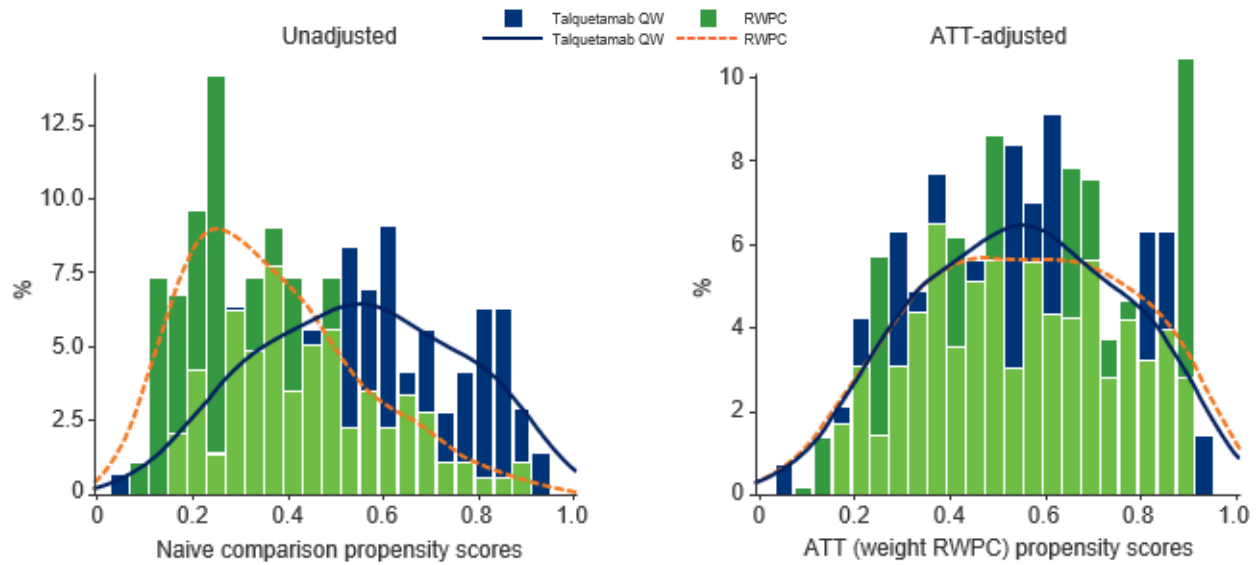
The total number of patients assessed for the 0.8 mg/kg Q2W cohort: multivariable regression (MonumenTAL-1, N = 145; RWPC, N = 177), ATO (MonumenTAL-1 and RWPC, N = 65), ATE (MonumenTAL-1, N = 145; RWPC, N = 177), and PS matching (MonumenTAL-1 and RWPC, N = 95)

Fig. S1 Propensity score distributions for unadjusted and ATT-adjusted analysis (**A**) and standardized mean difference plots before and after ATT weighting (**B**)^a

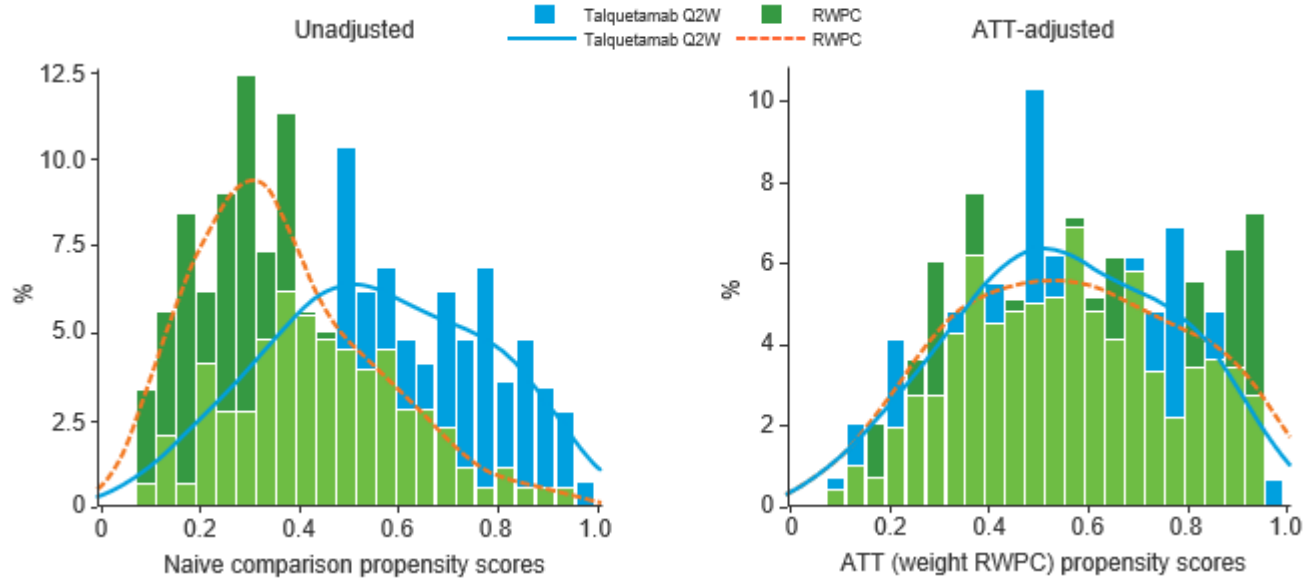
^aMain analysis adjusted for refractory status, ISS stage, time to progression on last regimen, extramedullary plasmacytomas, number of previous LOTs, years since MM diagnosis, average duration of previous lines, age, hemoglobin levels, LDH levels, creatinine clearance, ECOG PS, sex, type of MM, and previous hematopoietic stem cell transplant. *ATT* average treatment effect in the treated population; *ECOG PS* Eastern Cooperative Oncology Group performance status, *ISS* International Staging System, *LDH* lactate dehydrogenase, *LOT* line of therapy, *MM* multiple myeloma, *PC* physician's choice

A

Talquetamab 0.4 mg/kg QW

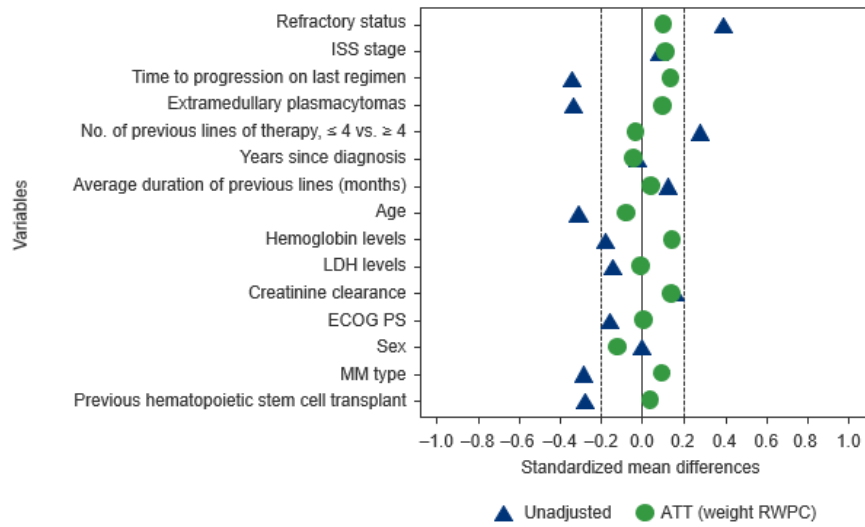


Talquetamab 0.8 mg/kg Q2W



B

Talquetamab 0.4 mg/kg QW



Talquetamab 0.8 mg/kg Q2W

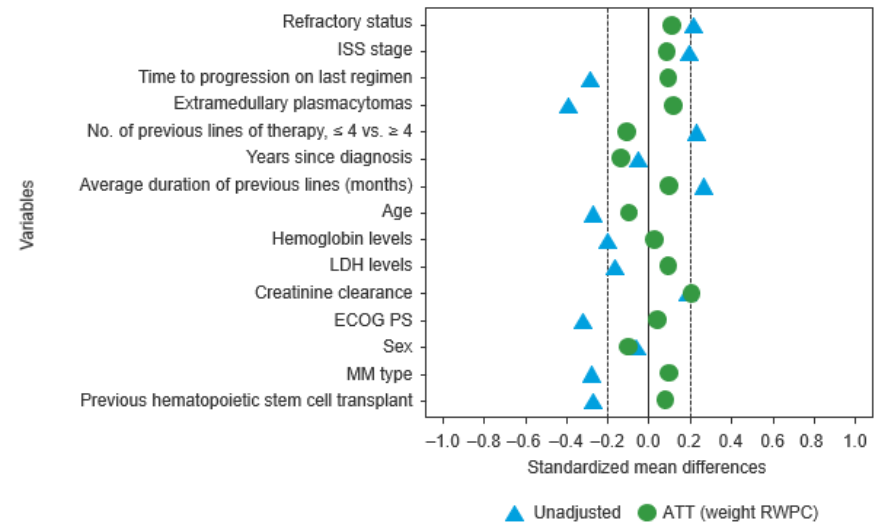
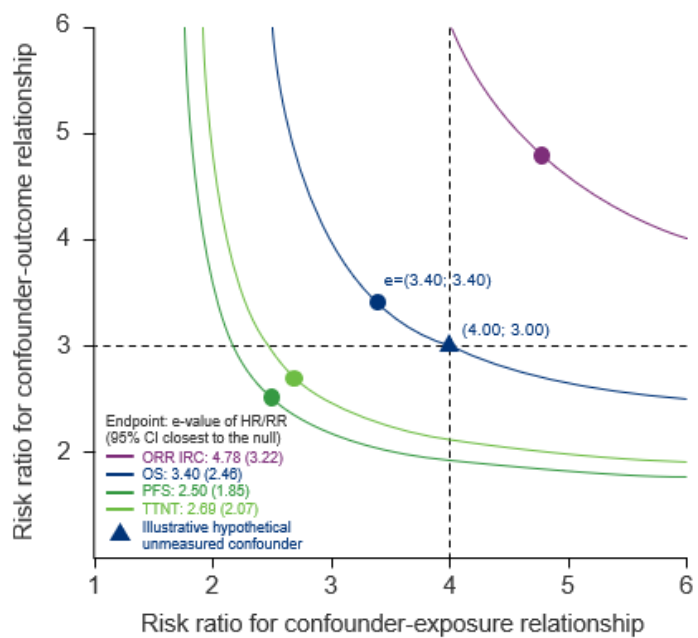


Fig. S2 Quantitative bias analyses for efficacy endpoints in **(A)** talquetamab 0.4 mg/kg QW and **(B)** talquetamab 0.8 mg/kg Q2W cohorts
CI confidence interval, *HR* hazard ratio, *ORR* overall response rate, *OS* overall survival, *PFS* progression-free survival, *TTNT* time to next treatment

A



B

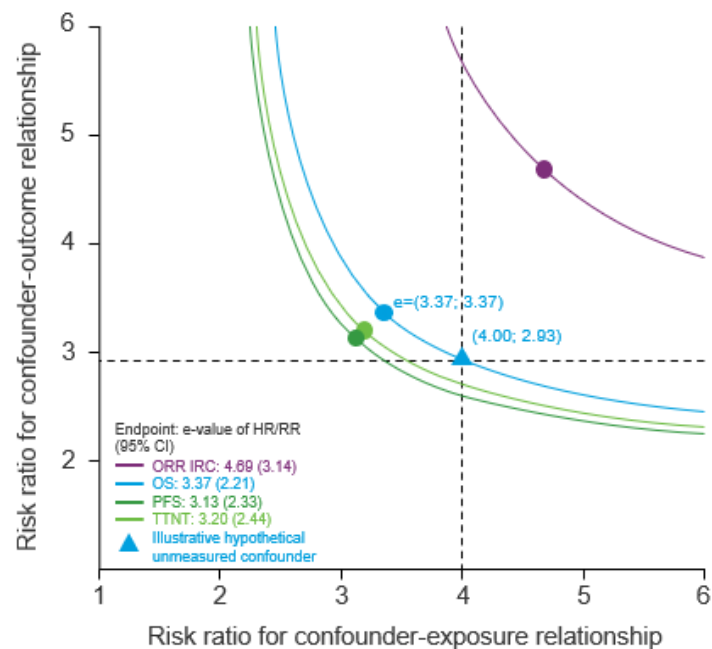


Table S1 Ethics committees/Institutional Review Boards in LocoMMotion

| Country | Ethics Committee/ Institutional Review Board address | Approval date | Ref # |
|----------------|---|----------------------|-----------------------------|
| US | The James/ A054 Starling Loving Hall 320 W. 10th Ave, Columbus, OH 43210 | 15 Nov 2019 | OSU-19288 |
| US | Columbia Research 615 West 131st St. 3rd floor, New York, NY 10027 | 21 Nov 2019 | IRB-AAAS7369 or 7571412 |
| US | Washington University in St. Louis 660 South Euclid Ave. Campus Box 8089, St. Louis MO 63110 | 19 Dec 2019 | 201912009 |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 10 Oct 2019 | IRB ID 7513- PDEisenberg |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 29 Oct 2019 | IRB ID 7513- Amazumder |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 19 Nov 2019 | IRB ID 7513- KSJahangir |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 21 Oct 2019 | IRB ID 7513- MEBednar |

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|----|--|-------------|-----------------------------|
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 13 Nov 2019 | IRB ID 7513- Cchen |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 3 Dec 2019 | IRB ID 7513- DHuang |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 30 Sep 2019 | IRB ID 7513- Zmalik |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 30 Oct 2019 | IRB ID 7513- Lshunyakov |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 21 Jan 2020 | IRB ID 7513- Hterebolo |
| US | St. Francis Hospital The Heart Center | 5 Dec 2019 | IRB #19-34 |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 4 Dec 2019 | IRB ID 7513- RRCaradonna |
| US | Sterling IRB 6300 Powers Ferry Road Suite 600-351, Atlanta GA 30339 | 5 Nov 2019 | IRB ID 7513- Mbajaj |

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|---------|---|-------------|----------------|
| Germany | EC Universitaet Heidelberg, Ethik-Kommission I der Medizinischen Fakultät Heidelberg, Alte Glockengiesserei 11/1, 69115 Heidelberg | 16 Aug 2019 | S-549/2019 |
| Germany | Tuebingen Ethik-Kommission an der Medizinischen Fakultät der Eberhard-Karls-Universität und am Universitätsklinikum Tübingen Gartenstraße 47, 72074 Tübingen | 16 Sep 2019 | 548/2019BO2 |
| Germany | EC medizinische Hochschule Hannover Ethik-Kommission d. Medizinischen Hochschule Hannover Carl-Neubergger-Str. 1, 3623 Hannover | 20 Sep 2019 | 8672_B0_K_2019 |
| Germany | EC Aertzekammer Hamburg Ethikkommission der Ärztekammer Hamburg; Körperschaft des öffentlichen Rechts Weidestr. 122b, 22083 Hamburg | 21 Oct 2019 | PV7092 |
| Germany | EC Universitaet Wuerzburg Josef-Schneider-Str. 4, Bau C15, 97080 Wuerzburg | 17 Jan 2020 | 172/19-me |

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|---------|---|-------------|-----------|
| Germany | EC Universiaet Koeln Geschäftsstelle der ethik-kommission der medizinischen fakultät der universität zu köln Kerpenerstr 62, 50937 Köln | 18 Feb 2020 | 19-1545_1 |
| Spain | Comité Coordinador de Ética de la Investigación Clínica de Andalucía Avda. de la Innovación, s/n. Edificio Arena 1, 41080 Sevilla | 2 Oct 2019 | N/A |
| Spain | Comité Coordinador de Ética de la Investigación Clínica de Andalucía Avda. de la Innovación, s/n. Edificio Arena 1, 41080 Sevilla | 7 Oct 2019 | N/A |
| Spain | Comité Coordinador de Ética de la Investigación Clínica de Andalucía Avda. de la Innovación, s/n. Edificio Arena 1, 41080 Sevilla | 7 Oct 2029 | N/A |
| Spain | Comité de Ética de la Investigación de Cadiz Avda. Ana de Viya, 21, 11009 Cadiz | 23 Jul 2020 | N/A |

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| Spain | Comité Coordinador de Ética de la Investigación Clínica de Andalucía Avda. de la Innovación, s/n. Edificio Arena 1, 41080 Sevilla | 30 Jul 2020 | N/A |
| UK | Tayside medical science centre Residency block level 3, George Pirie way, Ninewells hospital and medical school, Dundee, DD1 9SY | 29 Jul 2019 | DL/19/ES/0088 |
| Italy | Comitato Etico Area 3 ASL Lecce, Via Miglietta 5,73100 | 19 Sep 2019 | CE150036 |
| Italy | Comitato Etico Regione Liguria Largo Rosanna Benzi 10, 16132 Genova | 24 Jan 2020 | CE150193 |
| Italy | Comitato etico dell'IRCCS casa sollievo della sofferenza di s. giovanni rotondo Viale Cappuccini, 71013 SGR | 17 Jul 2019 | CE150037 |
| Italy | Comitato Etico Indipendente Azienda Ospedaliera Universitaria Policlinico S. Orsola-Malpighi di Bologna Via Albertoni 15, 40138 Bologna | 3 Oct 2019 | CE150192 |

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|-------|--|-------------|----------|
| Italy | Comitato Etico della Fondazione Policlinico Universitario Agostino Gemelli IRCCS Università Cattolica del Sacro Cuore Largo Agostino Gemelli 8, 00168 Roma | 22 Jul 2019 | CE150057 |
| Italy | Comitato Etico Catania 1 c/o AOU Policlinico Vittorio Emanuele Via Santa Sofia 78, Catania | 30 Oct 2019 | CE150101 |
| Italy | Comitato Etico "La Sapienza" Azienda Policlinico Umberto I Via Del Policlinico 155, 00161 Roma | 24 Sep 2019 | CE150031 |
| Italy | Comitato Etico interaziendale aou citta' della salute e della scienza di Torino Corso Bramante 88/90, 10126 Torino | 25 Oct 2019 | CE150115 |
| Italy | CESC della Provincia di Padova Via Giustininani 1, 35128 Padova | 25 Jun 2020 | CE150028 |
| Italy | Comitato Etico Palermo 2 IRB-EC Viale Strasburgo 233, 90136 Palermo | 14 Oct 2019 | CE150125 |
| Italy | Comitato etico referente per l'area di Pavia Viale Golgi 19, 27100 Pavia | 5 Sep 2019 | CE150183 |

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|-----------------|---|-------------|-----------|
| Italy | Comitato Etico Unico Regionale per la Basilicata IRB-EC Via Potito Petrone 1, 85100 Potenza | 16 Oct 2019 | CE150051 |
| Italy | Comitato Etico Interregionale c/o A.O.U. Policlinico Consorziiale Piazza Giulio Cesare 11, 70124 Bari | 8 Oct 2019 | CE150162 |
| Italy | Comitato Etico IRCCS Istituto Tumori "Giovanni Paolo II" Viale orazio flacco 65, 70124 Bari | 23 Apr 2020 | CE150168 |
| Italy | Comitato Etico della Romagna CEROM Via Piero Maroncelli 40, 47014 Meldola | 8 May 2020 | CE150190 |
| Italy | Comitato Etico Regione Toscana - Area Vasta Centro c/o Azienda Ospedaliera Universitaria Careggi Largo Brambilla 3, 50134 Firenze | 11 May 2020 | CE150071 |
| Belgium | Etische Commissie, Onderzoek UZ/KU Leuven Herestraat 49, 3000 Leuven | 13 Sep 2019 | S62984 |
| The Netherlands | METC van de stichting BEBO Dr. Nassaulaan 10, 9401 HK Assen | 16 Jul 2019 | 19.084/IH |

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|--------|---|-------------|----------------------------------|
| Poland | Komisja Bioetyczna przy, Uniwersytecie Medycznym im. Karola Marcinkowskiego w Poznaniu, Collegium Maius Dział Badań Naukowych; ul. Bukowska 70, 60-812 Poznań | 07 Nov 2019 | 991/19 |
| France | CPP EST III, Hopital de Brabois Rue du Morvan, 54511 Vandoeuvre-les-Nancy Cedex | 5 Sep 2019 | Numéro ID RCB: 2019-A01716-51 |
| Russia | Independent Interdisciplinary Committee on Ethics Expertise of Clinical Trials, 51 Leningradskiy prospect, 125468 Moscow | 4 Oct 2019 | 15 |

Table S2 Ethics committees/Institutional Review Boards in MoMMent

| Country | Ethics Committee/ Institutional Review Board Site | Approval date | Ref # |
|----------------|--|----------------------|---------------|
| Belgium | BE10002-Delforge | 14 Dec 2021 | S66063 |
| Germany | DE10001-Besemer | 21 Dec 2021 | 822/2021 BO |
| Germany | DE10002-Bittrich | 03 Mar 2022 | 297/21 |
| Germany | DE10003-Goldschmidt | 24 Nov 2021 | S-832/2021 |
| Spain | ES10006-Ocio | 2 Nov 2021 | 20/2021 |
| Spain | ES10007-Perez | 30 Dec 2021 | 2021-0113 |
| Spain | ES10011-Gonzalez Garcia | 14 Jan 2022 | 2021.612 |
| France | FR10002-Perrot | 23 Nov 2021 | 2022T3-03 HPS |
| France | FR10003-Karlin | 24 Nov 2021 | 2022T3-03 HPS |
| France | FR10006-Moreau | 25 Nov 2021 | 2022T3-03 HPS |
| France | FR10008-Vincent | 26 Nov 2021 | 2022T3-03 HPS |
| UK | GB10006-Kirkpatrick | 4 Feb 2022 | 21/WA/0349 |
| UK | GB10009-Willis | 16 Dec 2021 | 21/WA/0349 |
| UK | GB10011-Benjamin | 17 Dec 2021 | 21/WA/0349 |

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|-----------------|-----------------------|-------------|-----------------------|
| UK | GB10013-Pawlyn | 10 Mar 2022 | 21/WA/0349 |
| UK | GB10016-Lindsey-Hill | 18 Nov 2021 | 21/WA/0349 |
| Italy | IT10001-Cangialosi | 25 Jan 2022 | 242 AOR 2021 |
| Italy | IT10003-Cavo | 29 Dec 2021 | 4456/2021 |
| Italy | IT10004-Cerchione | 22 Dec 2021 | 10292/2021 - I.5/252 |
| Italy | IT10005-De Stefano | 18 Jan 2022 | 4535 |
| Italy | IT10006-Di Raimondo | 27 Dec 2021 | 61037 |
| Italy | IT10008-Mangiacavalli | 23 Dec 2021 | 0108695/21 |
| The Netherlands | NL10001-Roeloffzen | 17 Dec 2021 | W21.255/NWMO21.10.039 |
| The Netherlands | NL10002-van de Donk | 17 Dec 2021 | W21.255/NWMO21.10.039 |

Table S3 Ethics committees/Institutional Review Boards in MonumentAL-1

| Country | Ethics Committee/ Institutional Review Board Site | Approval date | Site ID Ref # |
|----------------|--|----------------------|----------------------|
| Belgium | J43-BE10003 | 20 Apr 2021 | 3680010 |
| Belgium | U77-BE10004 | 07 Apr 2021 | 3680010 |
| Belgium | U77-BE10002 | 23 Apr 2021 | 3680010 |
| Belgium | U77-BE10001 | 30 Apr 2021 | 3680010 |
| Belgium | U77-BE10003 | 07 Apr 2021 | 3680010 |
| China | U77-CN10005 | 24 Jan 2022 | 60868387 |
| China | U77-CN10007 | 16 Mar 2022 | 151734838/42909810 |
| China | U77-CN10008 | 19 Dec 2022 | 4578301 |
| China | U77-CN10002 | 21 Feb 2022 | 67081757 |
| China | U77-CN10011 | 28 Jun 2023 | 296960146 |
| China | U77-CN10001 | 07 Jan 2022 | 60868406 |
| China | U77-CN10003 | 04 Mar 2022 | 107910421 |
| China | U77-CN10004 | 25 Jan 2022 | 60890218/60868387 |
| France | U77-FR10001 | 23 Feb 2021 | 109642093 |
| France | U77-FR10002 | 15 Apr 2021 | 109642093 |
| France | U77-FR10003 | 20 Apr 2021 | 109642093 |
| France | U77-FR10006 | 19 Apr 2021 | 109642093 |
| France | U77-FR10004 | 23 Feb 2021 | 109642093 |
| France | U77-FR10005 | 14 Apr 2021 | 109642093 |
| Germany | U77-DE10001 | 10 May 2021 | 3619686 |
| Germany | U77-DE10005 | 04 Jun 2021 | 143018264/3619686 |
| Germany | U77-DE10003 | 20 Apr 2021 | 65501442/3619686 |
| Germany | U77-DE10002 | 11 Jun 2021 | 1966647/3619686 |
| Israel | U77-IL10003 | 30 Mar 2021 | 67104354 |
| Israel | U77-IL10001 | 16 Mar 2021 | 65304579 |
| Israel | U77-IL10002 | 17 Mar 2021 | 214624638 |
| Israel | U77-IL10004 | 11 Apr 2021 | 65304587 |
| Israel | U77-IL10005 | 20 Apr 2021 | 65304587 |

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|-------------------|-------------|-------------|-------------------|
| Japan | U77-JP10008 | 04 Jul 2022 | 24221094 |
| Japan | U77-JP10004 | 19 Jul 2022 | 61088794 |
| Japan | U77-JP10012 | 20 Sep 2022 | 233581552 |
| Japan | U77-JP10005 | 05 Sep 2022 | 4607595 |
| Japan | U77-JP10011 | 20 Jul 2022 | 50981609 |
| Japan | U77-JP10013 | 08 Nov 2022 | 112622177 |
| Japan | U77-JP10009 | 11 Jul 2022 | 61088673 |
| Japan | U77-JP10003 | 14 Jun 2022 | 200315467 |
| Japan | U77-JP10010 | 22 Sep 2022 | 4607379 |
| Japan | U77-JP10014 | 23 Aug 2023 | 290626781 |
| Japan | U77-JP10006 | 31 Jul 2022 | 2454817 |
| Japan | U77-JP10015 | 12 Sep 2023 | 162750144 |
| Japan | U77-JP10007 | 19 Sep 2022 | 214786450 |
| Netherlands | J43-NL10001 | 05 Sep 2019 | 67390905/61279424 |
| Netherlands | J43-NL10002 | 11 Feb 2019 | 61279424 |
| Netherlands | U77-NL10001 | 08 Jan 2021 | 2671572 |
| Netherlands | U77-NL10002 | 29 Jan 2021 | 2671572 |
| Poland | U77-PL10003 | 12 Apr 2021 | 295430681 |
| Poland | U77-PL10001 | 13 Apr 2021 | 295430681 |
| Poland | U77-PL10004 | 13 Apr 2021 | 295430681 |
| Poland | U77-PL10005 | 13 Apr 2021 | 295430681 |
| Poland | U77-PL10002 | 13 Apr 2021 | 295430681 |
| Republic of Korea | U77-KR10003 | 07 Apr 2021 | 87655320 |
| Republic of Korea | U77-KR10006 | 07 Apr 2021 | 9933063 |
| Republic of Korea | U77-KR10002 | 07 Apr 2021 | 3267750 |
| Republic of Korea | U77-KR10004 | 07 Apr 2021 | 3763615 |
| Republic of Korea | U77-KR10001 | 07 Apr 2021 | 3268760 |
| Republic of Korea | U77-KR10005 | 17 Apr 2021 | 3267957 |
| Spain | J43-ES10001 | 24 May 2018 | 7830447 |
| Spain | J43-ES10006 | 23 Apr 2021 | 7830447 |
| Spain | J43-ES10004 | 23 Jul 2019 | 7830447 |
| Spain | J43-ES10002 | 28 Feb 2019 | 7830447 |

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| Spain | J43-ES10003 | 26 Apr 2018 | 7830447 |
| Spain | U77-ES10006 | 02 Mar 2021 | 102343062 |
| Spain | U77-ES10002 | 08 Feb 2021 | 102343062 |
| Spain | U77-ES10003 | 17 Feb 2021 | 102343062 |
| Spain | U77-ES10009 | 18 Mar 2021 | 102343062 |
| Spain | U77-ES10001 | 03 Mar 2021 | 102343062 |
| Spain | U77-ES10010 | 11 Feb 2021 | 102343062 |
| Spain | U77-ES10005 | 04 Jun 2021 | 102343062 |
| Spain | U77-ES10011 | 19 Feb 2021 | 102343062 |
| Spain | U77-ES10004 | 16 Feb 2021 | 102343062 |
| Spain | U77-ES10007 | 10 Mar 2021 | 102343062 |
| Spain | U77-ES10008 | 28 Apr 2021 | 102343062 |
| US | J43-US10005 | 11 Jul 2018 | 75157813 |
| US | J43-US10009 | 02 Mar 2018 | 117606562 |
| US | J43-US10003 | 16 Dec 2017 | 18210329 |
| US | J43-US10007 | 28 Oct 2020 | 246139841 |
| US | J43-10001 | 05 Feb 2018 | 246139841 |
| US | U77-US10011 | 15 Apr 2021 | 246139841 |
| US | U77-US10015 | 27 Apr 2021 | 72485809 |
| US | U77-US10005 | 23 Jul 2021 | 4475249 |
| US | U77-US10026 | 31 Mar 2021 | 3615478 |
| US | U77-US10013 | 18 Feb 2021 | 3615478 |
| US | U77-US10016 | 09 Jun 2021 | 2630545 |
| US | U77-US10022 | 28 Jun 2021 | 3615478 |
| US | U77-US10024 | 01 Apr 2021 | 28196129 |
| US | U77-US10007 | 14 Apr 2021 | 3615478 |
| US | U77-US10014 | 13 May 2021 | 4783017 |
| US | U77-US10009 | 14 Jan 2021 | 61089064/117606562 |
| US | U77-US10003 | 28 Jan 2021 | 60967175 |
| US | U77-US10025 | 07 May 2021 | 3615478 |

Table S4 Treatment regimens in the RWPC cohort

| Treatment regimen^a | Frequency, n (%)^b (N = 177) |
|---|---|
| Pomalidomide, cyclophosphamide, and dexamethasone | 29 (16.4) |
| Pomalidomide and dexamethasone | 21 (11.9) |
| Carfilzomib and dexamethasone | 18 (10.2) |
| Belantamab mafodotin | 10 (5.6) |
| Panobinostat, bortezomib, and dexamethasone | 8 (4.5) |
| Carfilzomib, cyclophosphamide, and dexamethasone | 8 (4.5) |
| Elotuzumab, pomalidomide, and dexamethasone | 7 (4.0) |
| Carfilzomib, lenalidomide, and dexamethasone | 6 (3.4) |
| Ixazomib, lenalidomide, and dexamethasone | 6 (3.4) |
| Bortezomib, bendamustine, and dexamethasone | 4 (2.3) |
| Carfilzomib, pomalidomide, and dexamethasone | 4 (2.3) |
| Lenalidomide and dexamethasone | 4 (2.3) |
| Daratumumab, bortezomib, and dexamethasone | 3 (1.7) |
| Cyclophosphamide and dexamethasone | 3 (1.7) |
| Daratumumab, pomalidomide, and dexamethasone | 3 (1.7) |
| Melphalan and dexamethasone | 3 (1.7) |
| Melphalan | 3 (1.7) |
| Idecabtagene Vicleucel | 3 (1.7) |

^aOnly treatments used in ≥ 3 patients are presented

^bPercentages calculated with the number of patients in the all-treated analysis set as denominator (N = 177)

References

1. Chari A, Minnema MC, Berdeja JG, et al. Talquetamab, a T-cell-redirecting GPRC5D bispecific antibody for multiple myeloma. *N Engl J Med*. 2022;387(24):2232-44.
2. Mateos MV, Weisel K, De Stefano V, et al. LocoMMotion: a prospective, non-interventional, multinational study of real-life current standards of care in patients with relapsed and/or refractory multiple myeloma. *Leukemia*. 2022;36(5):1371-6.