

## **SUPPLEMENTARY MATERIAL**

### **Comparative Efficacy of Teclistamab Versus Current Treatments in Real-world Clinical Practice in the Prospective LocoMMotion Study in Patients with Triple-Class–Exposed Relapsed and/or Refractory Multiple Myeloma**

Philippe Moreau<sup>1</sup>, Niels W. C. J. van de Donk<sup>2</sup>, Michel Delforge<sup>3</sup>, Hermann Einsele<sup>4</sup>, Valerio De Stefano<sup>5</sup>, Aurore Perrot<sup>6</sup>, Britta Besemer<sup>7</sup>, Charlotte Pawlyn<sup>8</sup>, Lionel Karlin<sup>9</sup>, Salomon Manier<sup>10</sup>, Xavier Leleu<sup>11</sup>, Katja Weisel<sup>12</sup>, Francesca Ghilotti<sup>13</sup>, Joris Diels<sup>14</sup>, Ahmed Elsada<sup>15</sup>, Raul Morano<sup>16</sup>, Vadim Strulev<sup>14</sup>, Lixia Pei<sup>17</sup>, Rachel Kobos<sup>17</sup>, Jennifer Smit<sup>18</sup>, Mary Slavcev<sup>19</sup>, Maria-Victoria Mateos<sup>20</sup>

<sup>1</sup>Hematology Clinic, University Hospital Hôtel-Dieu, Nantes, France; <sup>2</sup>Department of Hematology, Amsterdam University Medical Center, Vrije Universiteit Amsterdam, Amsterdam, the Netherlands; <sup>3</sup>University of Leuven, Leuven, Belgium;

<sup>4</sup>Universitätsklinikum Würzburg, Medizinische Klinik und Poliklinik II, Würzburg, Germany; <sup>5</sup>Section of Hematology, Catholic University, Fondazione Policlinico A. Gemelli, IRCCS, Rome, Italy; <sup>6</sup>Service d'Hématologie, Centre Hospitalier Universitaire de Toulouse, Toulouse, France; <sup>7</sup>University of Tübingen, Tübingen, Germany; <sup>8</sup>The Institute of Cancer Research, London, UK; <sup>9</sup>Centre Hospitalier Lyon Sud, France; <sup>10</sup>University of Lille, Lille, France; <sup>11</sup>CHU and University, Poitiers, France; <sup>12</sup>University Medical Center Hamburg-Eppendorf, Hamburg, Germany; <sup>13</sup>Janssen-Cilag SpA, Cologno Monzese, Italy; <sup>14</sup>Janssen Pharmaceutica NV, Beerse, Belgium; <sup>15</sup>Janssen-Cilag, High Wycombe, Buckinghamshire, UK; <sup>16</sup>Janssen EMEA, Madrid, Spain;

<sup>17</sup>Janssen Research & Development, Raritan, NJ, USA; <sup>18</sup>Janssen Research & Development, Spring House, PA, USA; <sup>19</sup>Janssen Global Services, LLC, Raritan, NJ, USA; <sup>20</sup>University Hospital of Salamanca/IBSAL, CIC, Salamanca, Spain

**Corresponding Author:**

Maria-Victoria Mateos

Hospital Universitario de Salamanca

Departamento de Hematología

Paseo de la Transición S/N, 37007. Salamanca

Castilla y León

Spain.

Email: [mvmateos@usal.es](mailto:mvmateos@usal.es)

**Appendix S1** Data sources, study designs, and analysis methods

**Fig. S1** Propensity score distributions and standardized mean difference plots

**Table S1** Ethics committees/Institutional Review Boards in LocoMMotion

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## **Appendix S1** Data sources, study designs, and analysis methods

### **Data Sources**

#### ***Patients Treated with Teclistamab in MajesTEC-1***

MajesTEC-1 is an open-label, single-arm phase 1b/2 clinical trial studying the safety and efficacy of teclistamab 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 diagnostic criteria and have had previous exposure to  $\geq 1$  proteasome inhibitor, 1 immunomodulatory inhibitor, and 1 anti-CD38 monoclonal antibody. This study consists of 3 distinct parts, registered as 2 unique clinical trials: parts 1 and 2 represent the phase 1 portion of the study (NCT03145181), and part 3 represents the phase 2 portion of the study (NCT04557098). The phase 1 portion assessed dose escalation and expansion of teclistamab, whereas the phase 2 portion examined efficacy. Patients in phase 1 were treated with intravenous or subcutaneous (SC) teclistamab, with doses ranging from 0.3 to 720  $\mu\text{g}/\text{kg}$  and 80 to 3000  $\mu\text{g}/\text{kg}$ , respectively. The recommended phase 2 dose (RP2D) was determined to be teclistamab 1.5 mg/kg SC, and 40 patients from phase 1 received this dose. As part of the phase 2 portion of MajesTEC-1, an additional 125 patients were administered the RP2D, for a total of 165 patients analyzed as per the data cutoff relevant to this report (March 16, 2022).

### ***Patients Receiving Treatments from Real-world Clinical Practice in LocoMMotion***

LocoMMotion (NCT04035226) is the first prospective, multinational, non-interventional study of therapies used in real-world physician's choice of therapy in patients with triple-class–exposed RRMM and was described elsewhere in detail [2]. A total of 76 centers from 9 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 data from LocoMMotion as of November 2, 2021, with a median duration of patient follow-up of 16.13 months.

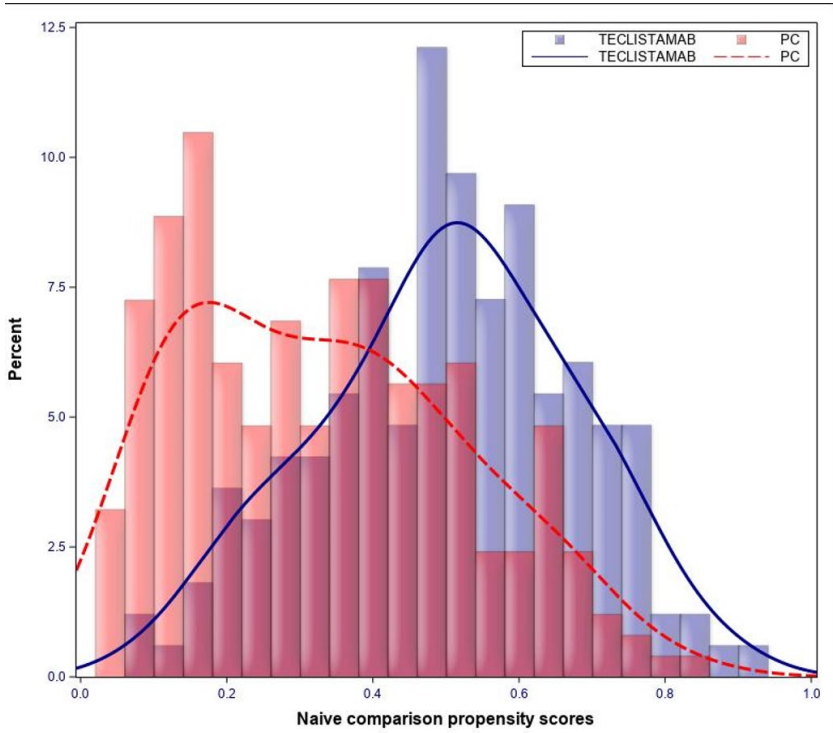
### ***Analysis Populations and Design***

The intention-to-treat (ITT) populations in MajesTEC-1 and the RWPC cohort were considered analogous and were compared in the current analyses. The ITT population in MajesTEC-1 included all participants who were treated with teclistamab, 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, with the index date defined as day 1 cycle 1 of the real-life standard of care treatment.

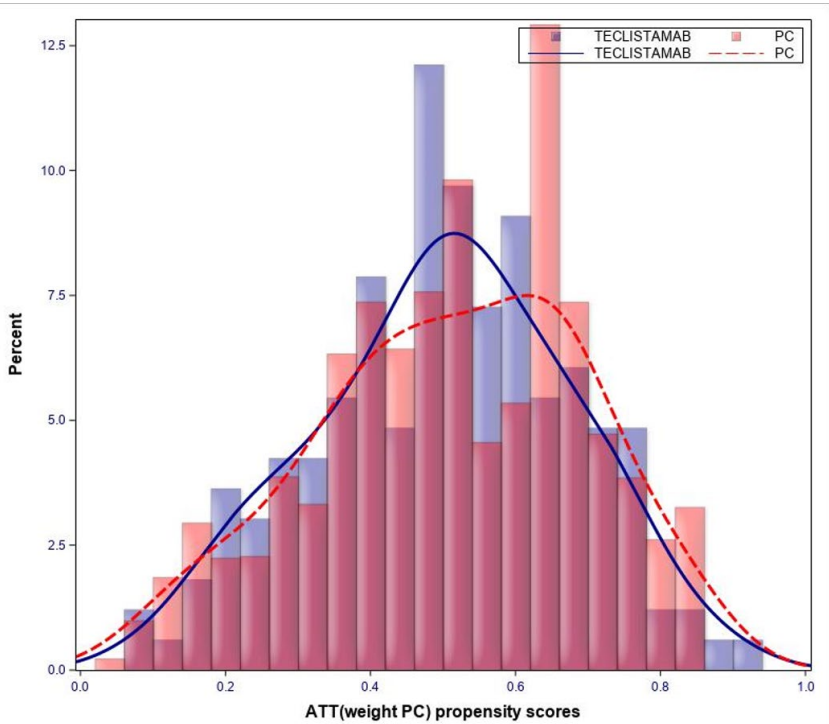
**Fig. S1** Propensity score distributions (A) and standardized mean difference plots (B). Main analysis adjusted for refractory status, ISS stage, time to progression on last regimen, extramedullary plasmacytomas, number of previous LOTs, years since MM diagnosis, average duration of previous lines, 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, *EMD* extramedullary disease, *ISS* International Staging System, *LDH* lactate dehydrogenase, *LOT* line of therapy, *MM* multiple myeloma, *PC* physician's choice

**(A) Distributional balance for unadjusted and ATT-adjusted analysis**

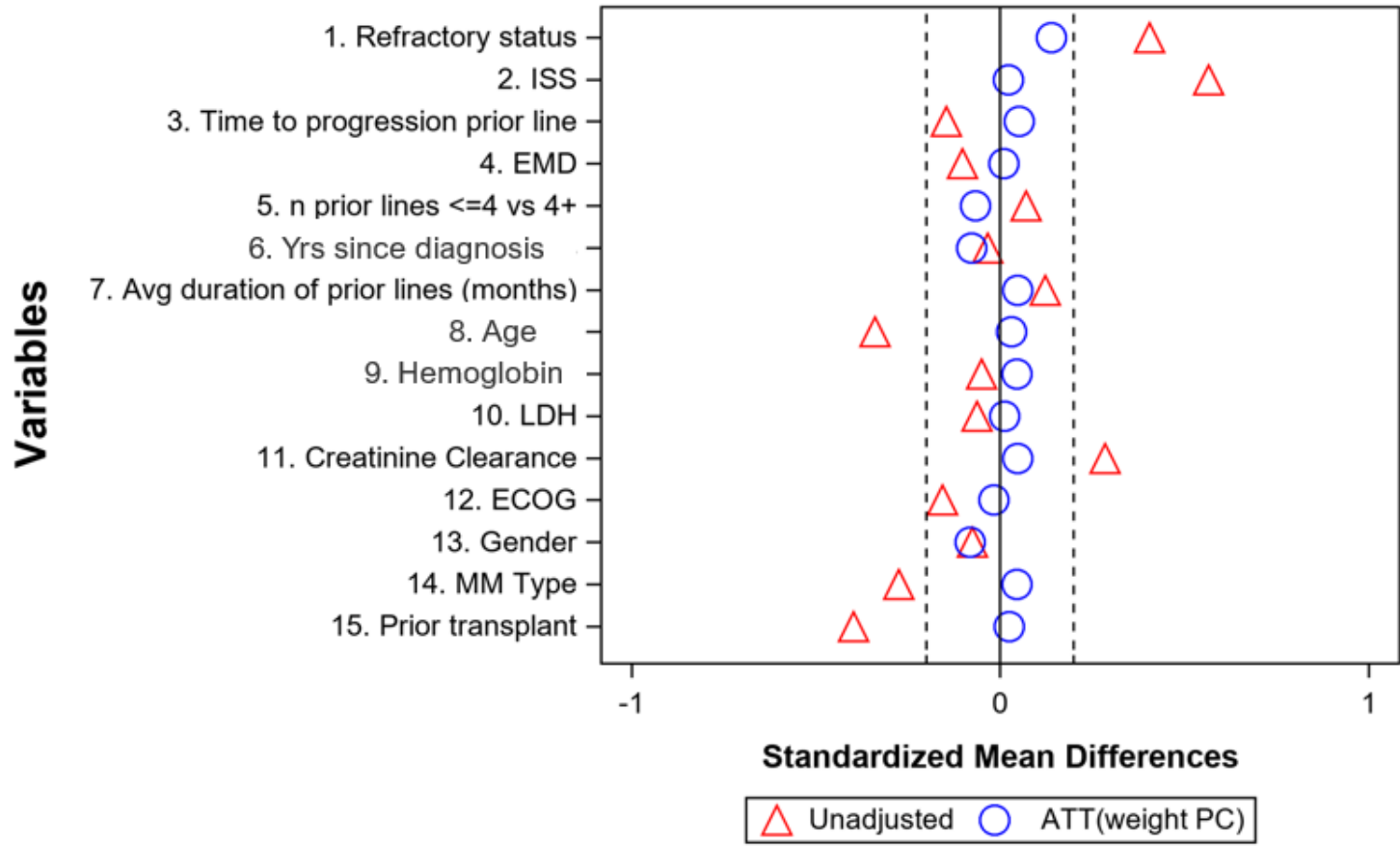
**Unadjusted**



**ATT-Adjusted**



**(B) Standardized mean difference plots before and after ATT weighting**



**Table S1** Ethics committees/Institutional Review Boards in LocoMMotion

<b>Country</b>	<b>Ethics Committee/ Institutional Review Board address</b>	<b>Approval date</b>	<b>Ref #</b>
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
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
Germany	EC Universiaet 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-Neuberger-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
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
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
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
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
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

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**Table S2** Ethics committees/Institutional Review Boards in MajesTEC-1

<b>Country</b>	<b>Ethics Committee/ Institutional Review Board address</b>	<b>Approval date</b>
Belgium	Ethische Commissie Onderzoek UZ/KU Leuven Campus Gasthuisberg, Herestraat 49 Leuven 3000	21 Dec 2020
Belgium	Commissie voor Medische Ethiek UZ Gent 2de verdieping (gebouw 75), C. Heymanslaan 10 Gent 9000	21 Dec 2020
Canada	Health Research Ethics Board of Alberta Clinical Trials Committee 1500,10104 - 103 Avenue NW Edmonton, Alberta, T5J 0H8	24 Nov 2020
Canada	UHN Research Ethics Board 700 University Ave, 10 <sup>th</sup> Floor, Room 10-56 Toronto, ON, M5G 1Z5	19 Nov 2020
Canada	McGill University Health Centre (MUHC) Centre for Applied Ethics 5100 boul de Maisonneuve Ouest, 5 <sup>th</sup> floor Office 576, Montreal, Quebec H4A 3T2	06 Jan 2021
Canada	Health Research Ethics Board of Alberta Clinical Trials Committee 1500, 10104 – 103 Avenue NW, Edmonton, Alberta T5J 0H8	26 Nov 2020
France	Comité de protection des personnes OUEST III C.H.U. La Milétrie – Pavillon Administratif - Porte 213, 2 rue de la milétrie – CS 90 577, POITIERS CEDEX 86021	14 Nov 2019
France	CPP Ouest III Bat. Vie La Sante – 1er etage porte 101, CHU de Poitiers, 2 rue de la miletrie Poitiers Cedex 86021	12 Oct 2020

Germany	Ethik-Kommission an der Medizinischen Fakultät der Eberhard-Karls-Universität und am Universitätsklinikum Tübingen Gartenstraße 47 Tübingen 72074	11 Nov 2020
Germany	Ethik-Kommission der Medizinischen Fakultät Würzburg, Institut für Pharmakologie Versbacher Str. 9 Würzburg 97078	11 Nov 2020
Germany	Ethik-Kommission an der Medizinischen Fakultät der Universität Leipzig Käthe-Kollwitz-Straße 82, Haus: Karl-Sudhoff-Institut Leipzig, Saxony, 04109	11 Nov 2020
Italy	Comitato Etico Area Vasta Emilia Centro regione Emilia-Romagna, c/o A.O.U. Policlinico S.Orsola Malpighi Via Albertoni 15 Bologna 40138	11 Jan 2021
Italy	Comitato Etico della Provincia di Bergamo Azienda Ospedaliera Papa Giovanni XXIII Piazza OMS, 1 BERGAMO 24127	07 Dec 2020
Italy	COMITATO ETICO INDIPENDENTE DELLA FONDAZIONE IRCCS ISTITUTO NAZIONALE DEI TUMORI DI MILANO Via Giacomo Venezian, 1, Milano 20133	13 Jan 2021
Netherlands	METC Vrije Universiteit Medisch Centrum, Amsterdam De Boelelaan 1117 Amsterdam, 1081 HV	27 Sep 2018
Netherlands	METC Vrije Universiteit Medisch Centrum, Amsterdam De Boelelaan 1117 Amsterdam, 1081 HV	21 Dec 2021

Spain	Comité Ético de Investigación Clínica de Navarra, Departamento de Salud Pabellón de Docencia, C/ Irunlarrea, 3, Pamplona, 31008	10 May 2017
Spain	HOSPITAL DE NAVARRA - CEIC DE NAVARRA Calle Irunlarrea 3, Departamento de Salud (pabellón de Docencia) Pamplona, NAVARRA, 31008	07 Sep 2020
Sweden	Etikprövningsmyndigheten, Box 2110, Uppsala, 75002	28 Aug 2017
Sweden	Etikprövningsmyndigheten, Box 2110, Uppsala, 75002	17 Aug 2020
UK	University College London Hospitals NHS Foundation Trust 235 Euston Road, Bloomsbury London NW1 2BU	23 Nov 2020
UK	South Central Hampshire B Research Ethics, National Research Ethics Service Level 3, Block B, Whitefrairs, Lewins Mead, Bristol BS1 2NT	23 Nov 2020
UK	South Central Hampshire B Research Ethics, National Research Ethics Service Level 3, Block B, Whitefrairs, Lewins Mead, Bristol BS1 2NT	12 May 2021
UK	South Central Hampshire B Research Ethics, National Research Ethics Service Level 3, Block B, Whitefrairs, Lewins Mead, Bristol BS1 2NT	21 Dec 2020
UK	Health Research Authority 2 Redman Place, Stratford London E20 1JQ	23 Nov 2020
UK	Health Research Authority 2 Redman Place, Stratford London E20 1JQ	12 May 2021



UK	Health Research Authority 2 Redman Place, Stratford London E20 1JQ	21 Dec 2020
UK	Southampton General Hospital Tremona Rd Southampton, Southampton, SO16 6YD	12 May 2021
UK	Royal Marsden Hospital- R+D Fulham Road London, London, SW3 6JJ	21 Dec 2020
USA	Advarra 6100 Merriweather Dr., Suite 600, Columbia, MD, 21044	03 May 2017
USA	Advarra 6100 Merriweather Dr., Suite 600, Columbia, MD, 21044	18 Dec 2020
USA	Icahn School of Medicine at Mount Sinai Program for the Protection of Human Subjects IRB One Gustave L. Levy Place NY, NY, 10029	21 Nov 2017
USA	Icahn School of Medicine at Mount Sinai Program for the Protection of Human Subjects IRB One Gustave L. Levy Place NY, NY, 10029	19 Oct 2020
USA	University of Pennsylvania Institutional Review Board 3800 Spruce Street, First Floor Suite 151 Philadelphia, PA 19104	20 Dec 2017
USA	University of Pennsylvania Institutional Review Board 3800 Spruce Street, First Floor Suite 151 Philadelphia, PA 19104	30 Sep 2020
USA	WCG IRB 1019 39th Avenue SE Puyallup, WA, 98374	01 Jun 2017

USA	WCG IRB 1019 39th Avenue SE, Suite 120 Puyallup, WA, 98374	22 Jul 2022
USA	Western Institutional Review Board 1019 39th Avenue SE, Suite 120 Puyallup, WA, 98374	21 Sep 2020
USA	WIRB 1019 39th Ave SE #120, Puyallup, WA, 98374	24 Dec 2020
USA	Emory University IRB 1599 Clifton Road NE, 5 <sup>th</sup> Floor Atlanta, GA 30322	17 Nov 2020
USA	WIRB 1019 39th Ave SE #120, Puyallup, WA, 98374	27 Dec 2020
USA	WIRB 1019 39th Ave SE #120 Puyallup, WA, 98374	30 Dec 2020
USA	Stanford University IRB 3000 El Camino Real Five Palo Alto Sq, 4 <sup>th</sup> Floor Palo Alto, CA 93406	13 Oct 2020

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**Table S3** Treatment regimens, LocoMMotion cohort

<b>Treatment regimen</b>	<b>Frequency (%)</b>
Carfilzomib-dexamethasone	34 (13.7)
Cyclophosphamide-dexamethasone-pomalidomide	34 (13.7)
Dexamethasone-pomalidomide	29 (11.7)
Dexamethasone-ixazomib-lenalidomide	15 (6.0)
Bortezomib-dexamethasone-panobinostat	11 (4.4)
Bendamustine-bortezomib-dexamethasone	7 (2.8)
Carfilzomib-cyclophosphamide-dexamethasone	7 (2.8)
Dexamethasone-elotuzumab-pomalidomide	6 (2.4)
Dexamethasone-lenalidomide	6 (2.4)
Bortezomib-dexamethasone-doxorubicin	5 (2.0)
Carfilzomib-dexamethasone-lenalidomide	5 (2.0)
Carfilzomib-dexamethasone-pomalidomide	5 (2.0)
Melphalan	5 (2.0)
Belantamab mafodotin	4 (1.6)
Bendamustine-prednisone	4 (1.6)
Cyclophosphamide-dexamethasone	4 (1.6)

Regimens prescribed to < 4 patients not shown. Participants (*N* = 248) can be counted in > 1 regimen or combination if they have received > 1 combination in their treatment before progression or death

## References

1. Moreau P, Garfall AL, van de Donk NWCJ, et al. Teclistamab in relapsed or refractory multiple myeloma. *N Engl J Med*. 2022;387:495–505.
2. Mateos M-V, 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;36:1371–6.