

Structured assessment of frailty in multiple myeloma as a paradigm of individualized treatment algorithms in cancer patients at advanced age

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Received: November 14, 2019.

Accepted: January 30, 2020.

Pre-published: April 2, 2020.

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Suppl. Table 1. Selected clinical trials in multiple myeloma patients with frailty assessments being included therein

#	Institution performing the analysis	Trial title	Phase	Trial-#	Retro- vs. prospective	number of pts	Results / Study specifics
1	University of Freiburg (UKF)	Allogeneic (allo)-SCT	IV	NCT00655343	retrospective	109	R-MCI did improve from 4 before to 3 after allo-SCT. Renal function and age declined over time, but did not necessarily decreased QoL measures after allo-SCT in long-term survivors.
2	UKF	VBDD	I / II	NCT01394354	prospective	33	QoL improved in responsive pts: both frailty scores and functional tests were used and showed R-MCI improvement as well as of other frailty scores and functional tests.
3	Ohio State	Frailty + functional assessment in MM	IV, Observational	NCT02033928	prospective	111	Change in Comprehensive Frailty Assessment: before and after transplant (Tx) and non-Tx pts. Study ongoing.
4	City of Hope + University of Rochester	Touchscreen-based geriatric and functional assessment	IV	NCT03068637	prospective	165	Limited pt time required for survey completion and provider time for results review show mGA can be incorporated into clinical workflow. Real-time mGA results indicating fit/frailty status influenced treatment decisions.
5	Torino, GIMEMA	Rd vs. Rd-R in unfit MM pts	II	NCT02215980	prospective	210	Rd-R improved event-free survival (EFS) endpoints in unfit MM pts. First results shown at ASH 2018.
6	Indiana university	Maia randomization: standard Dara-Rd vs. reduction in frail pts	II, Open label	NCT04223661	prospective	44	Dara-Rd vs. reduced dose with frailty index ≥ 2 . Study ongoing.
7	HOVON 143	Efficacy and tolerability of Ixa-Dara-dex in unfit and frail NDMM pts	II	NTR6297.	prospective	n=65 unfit, n=67 frail pts	Dose-adjustment feasible and advisable, but early mortality still occurring. Study ongoing, early ASH results shown 2019: #695.
8	University of Leeds, UK study group	FiTNEss (Frailty-adjusted therapy in Tx Non-Eligible pts with NDMM)	III	NCT03720041	prospective	740	IRd according to frailty score - randomization into 4 groups. Study ongoing.

Abbreviations:

pts: patients, #: number, UKF: University of Freiburg Medical Center, allo-SCT: allogeneic stem cell transplantation, R-MCI: revised myeloma comorbidity index, Tx: transplantation
 VBDD: Vorinostat-Bortezomib-Doxorubicin-Dexamethason treatment in relapsed/refractory multiple myeloma (RRMM), QoL: Quality of life, ND MM pts: newly diagnosed MM patients, ,
 GIMEMA: Italian study group. Rd vs. RD-R: Lenalidomide-dexamethason vs. continuation of reduced lenalidomide doses without dexamethason in Rd-R,
 IRd: Ixazomib-Lenalidomide-Dexamethasone; Ixa-Dara-Dex: Ixazomib-Daratumumab-Dexamethasone; Dara-RD: Daratumumab-lenalidomide-dexamethasone

see other studies in MM also in R.Mina, S.Bringhen, T.M.Wildes, S.Zweegman, AE.Rosko. ASCO educational book 2019