Supplementary Table 3. Study characteristics and assessment tools used

Author, year	Study design	Patients	Diagnostic tool(s)	Intervention	Evaluative tool(s)	Assessment interval	Reported outcomes
Mileshkin et al., 2006 [17]	Prospective observational study	75 MM patients enrolled in a multicenter trial of dose-escalating thalidomide and/or interferon	NCS; NCI CTCAE	-	NCS; NCI CTCAE	Weekly for 24 weeks and then monthly from baseline	The actuarial incidence of neuropathy increased from 38% at 6 months to 73% at 12 months, with 81% of responding patients developing this complication
Richardson et al., 2006 [18]	Prospective observational study	256 MM patients treated with bortezomib	FACT/GOG-NTX	-	FACT/GOG-NTX	Baseline; on day 1 of cycles 3, 5, and 7; and study end	Neuropathy led to dose reduction in 12% and discontinuation in 5% of patients
Lanzani et al., 2008 [19]	Prospective observational study	48 MM patients treated with bortezomib	TNS-R; VAS	-	TNS-R; VAS	Baseline, and 2 and 4 cycles of treatment	The clinical course of bortezomib-induced PN was more severe in patients with the highest baseline TNS-R
Cartoni et al., 2012 [20]	Prospective observational study	44 MM patients treated with bortezomib	-	Controlled-release oxycodone	NRS	Baseline and days 3, 7, and 14 from treatment initiation	The pain intensity decreased from a mean NRS of 7.6 at baseline to 1.3 on day 14
Thomas et al., 2012 [21]	Abstract	20 MM patients receiving bortezomib or thalidomide	NRS; CINAS	-	NRS; CINAS	At the time of referral	CINAS demonstrated validity, reliability, and sensitivity in patients with MM during and after chemotherapy
Briani et al., 2013 [22]	Retrospective observational study	30 MM patients previously treated with bortezomib and/or thalidomide and starting lenalidomide and dexamethasone	TNS-C; NRS	-	TNS-C; NRS	Baseline and 6 and 12 months from beginning of lenalidomide treatment	At baseline, 53.3% patients had chemotherapy-induced PN (mean TNS-C 5.8); after 6 months, PN condition was unchanged in 13 patients, improved in 1 patient, and worsened in 2 patients; after 12 months, the patient who had improved remained stable, and the condition of the 2 patients who had worsened returned to baseline TNS-C value
Callander et al., 2014 [23]	Prospective randomized clinical trial	19 MM patients treated with bortezomib, doxorubicin, and oral low-dose dexamethasone	FACT/GOG-NTX; FACIT-Fatigue; NPI; GP	-	FACT/GOG-NTX; FACIT-Fatigue; NPI; GP	Baseline, cycle 3, and end of study	Patient-reported fatigue and PN measured by FACT/GOG-NTX increased, although time to complete GP testing shortened

https://doi.org/10.3904/kjim.2025.281

https://doi.org/10.3904/kjim.2025.281

Supplementary Table 3. Continued

Author, year	Study design	Patients	Diagnostic tool(s)	Intervention	Evaluative tool(s)	Assessment interval	Reported outcomes
Cho et al., 2014 [24]	Retrospective cohort study	55 MM patients who had received bortezomib-dexamethasone or bortezomib-melphalan-prednisone	NCI CTCAE	Modified dosage and schedule of bortezomib	FACT/GOG-NTX	1st, 8th, 16th, and 24th administration of bortezomib	Neuropathy symptoms significantly decreased after the intervention
Garcia et al., 2014 [25]	Prospective observational study	19 MM patients affected by PN	NCI CTCAE (grade 2 or above)	Electroacupuncture	FACT/GOG-NTX; BPI-SF; NCS	Baseline and weeks 4, 9, and 13 from treatment	From baseline to week 13, significant improvements in FACT/GOG-NTX score were observed
Zaroulis et al., 2014 [26]	Prospective observational study	10 MM patients sequentially evaluated with the TNS-R after bortezomib administration	TNS-R; NCS	-	TNS-R; NCS	Before bortezomib initiation and 6 and 12 months after bortezomib administration	Patients showed a significantly increased TNS-R score 6 months after bortezomib administration, while TNS-R values were slightly reduced 12 months later but not normalized
Dalla Torre et al., 2016 [27]	Prospective cohort study	19 MM patients treated with lenalidomide and dexamethasone	TNS-C; NCS	Long-term lenalidomide treatment (2 years or 5 years)	TNS-C; NCS	At baseline and at 1, 2, or 5 years after lenalidomide treatment initiation	No correlation was found between lenalidomide cumulative dose and neuropathy
Han et al., 2017 [28]	Prospective randomized clinical trial	104 MM patients	NCI CTCAE (grade 2 or above)	Acupuncture and/or methylcobalamin	VAS; FACT/GOG-NTX; NCS	Before and after treatment	Fact/GOG-NTX score and NCS significantly improved in the acupuncture combined with methylcobalamin group
Lakshman et al., 2017 [29]	Prospective observational study	26 treatment-naive MM patients receiving weekly cyclophosphamide, bortezomib, and dexamethasone	TNS-R; TNS-C; NCI CTCAE; NCS	-	TNS-R; TNS-C; NCI CTCAE	Baseline, and termination of treatment	Among 12 patients who did not have PN by NCI CTCAE scale, 41.7% and 16.7% patients satisfied the criteria for PN by TNS-R and TNS-C, respectively
Zhi et al., 2018 [30]	Prospective cohort study	27 MM patients treated with bortezomib	NCI CTCAE (grade 2 or above)	10 acupuncture treatment; twice weekly for the first 2 weeks, weekly for 4 weeks, and then biweekly for 4 weeks	NPS; FACT/GOG-NTX	Weekly at baseline, during, and after acupuncture treatment	The acupuncture group showed statistically significant reductions in individual symptoms in both NPS and FACT/GOG-NTX instruments

Supplementary Table 3. Continued

Author, year	Study design	Patients	Diagnostic tool(s)	Intervention	Evaluative tool(s)	Assessment interval	Reported outcomes
Maschio et al., 2019 [31]	Prospective randomized clinical trial	33 MM patients	NCI CTCAE (grade 0); VAS (grade 0)	Docosahexaenoic acid and α-lipoic acid	NCS; VAS NCI CTCAE; TNS-R; EORTC QLQ-CIPN20	Baseline and 6 months from treatment	The mean VAS, NCI CTCAE, TNS-R, and EORTC CIPN-20 scores were significantly higher at 6 months than those at baseline
Mendoza et al., 2020 [32]	Cross-sectional study	20 MM patients treated with bortezomib	Positive response to: "Are you experiencing any unusual feelings in your hands or feet related to therapy for your cancer?"	-	TNAS; EORTC QLQ-CIPN20	At the time of referral	Correlation coefficients for the 9-item TNAS and EORTC-CIPN20 were 0.69 for the sensory subscale, 0.70 for the motor subscale, and 0.32 for the autonomic subscale, indicating good validity
Yan et al., 2020 [33]	Prospective interventional single-arm study	6 MM patients received 4–6 treatment cycles with subcutaneous bortezomib-based chemotherapy	NCS; FACT/GOG-NTX; NCI CTCAE	Rat nerve growth factor combined with vitamin B	FACT/GOG-NTX	Before chemotherapy and after 2 months of treatment	FACT/GOG-NTX questionnaire scores in the treatment and control groups decreased, and symptom alleviation was more obvious in the treatment group
Maschio et al., 2022 [34]	Prospective randomized clinical trial	16 MM patients treated with bortezomib with baseline normal neurological evaluation without symptoms of PN	NCI CTCAE	Nutraceutical compound composed of nervonic acid, curcuma rizoma, and l-Arginine	NCS; VAS NCI CTCAE; TNS-R; EORTC QLQ-CIPN20	Baseline and 6 months from treatment	The mean VAS, NCI CTCAE, TNS-R, and EORTC CIPN-20 scores were significantly higher at 6 months than those at baseline
Oortgiesen et al., 2023 [35]	Prospective cohort study	35 MM patients with inadequate 25-hydroxyvitamin D levels	ICPNQ	Oral vitamin D 3 for 6 months	ICPNQ	Baseline and 2 and 6 months from treatment	The percentage of patients with any-grade PN decreased from 88.6% at baseline to 80% after 6 months; in 37% of the patients, the PN grade improved after 6 months
Statler et al., 2023 [36]	Abstract	12 MM patients previously received a bortezomib-containing regimen	EORTC QLQ-CIPN20	Cryocompression therapy	EORTC QLQ-CIPN20	Baseline and weeks 4 and 8	Total QLQ-CIPN20 scores significantly decreased at weeks 4 and 8

https://doi.org/10.3904/kjim.2025.281

Supplementary Table 3. Continued

Author, year	Study design	Patients	Diagnostic tool(s)	Intervention	Evaluative tool(s)	Assessment interval	Reported outcomes
Yan et al., 2023 [37]	Retrospective observational study	30 MM patients treated with bortezomib or ixazomib and/or IMiD	NCI CTCAE (grade 2 or above)	Repetitive transcranial magnetic stimulation treatment	VAS; EORTC QLQ-CIPN20; NCS	Pretreatment (1–3 days before the start of treatment) and post-treatment (1 week after the last treatment)	EORTC-CIPN20-item scale data revealed significant reductions in scores; there were enhancements in both motor conduction and sensory conduction velocity
Moreno-Alonso et al., 2024 [38]	Case series	7 MM patients with bortezomib- and/or thalidomide-induced PN	-	Adhesive capsaicin 8% patch	NRS	7 Days after patch application	The average NRS score decreased 7 days after patch application

MM, multiple myeloma; NCS, nerve conduction study; NCI CTCAE, National Cancer Institute Common Terminology Criteria for Adverse Events; FACT/GOG-NTX, Functional Assessment of Cancer Therapy/Gynecologic Oncology Group–Neurotoxicity; TNS-R, Reduced version of Total Neuropathic Score; VAS, visual analog scale; PN, peripheral neuropathy; NRS, numerical rating scale; CINAS, chemotherapy-induced neuropathy assessment scale; TNS-C, Total Neuropathy Score clinical version; NPI, Neuropathic Pain index; GP, Grooved Pegboard; BPI-SF, Brief Pain Inventory – Short Form; NPS, Neuropathy Pain Scale; EORTC QLQ-CIPN20, European Organization for Research and Treatment of Cancer Quality of Life Questionnaire–Chemotherapy-Induced Peripheral Neuropathy; TNAS, Treatment-induced Neuropathy Assessment Scale; ICPNQ, Indication for Common Toxicity Criteria Grading of Peripheral Neuropathy Questionnaire; IMiD, immunomodulatory drug.

https://doi.org/10.3904/kjim.2025.281