Supplementary-material

Supplementary Table 1 Effect size metrics reported for circulating miRNAs in CIPN studies

Study (cancer; regimen)	Specimen / platform	CIPN definition / grading	miRNA(s) (direction)	Effect size metrics reported
Ju et al., 2022 [37]	Plasma; high-throughput RNA sequencing → qRT-PCR validation	NCI-CTCAE grading of adverse events (CIPN)	hsa-miR-378f (down), hsa-miR-885-5p (down), hsa-miR-200c-3p (down), hsa-miR-4666a-3p (down)	Fold change and p-values (RNA-seq): miR-378f FC −4.620, p=0.0006; miR-885-5p FC −2.449, p=0.008; miR-200c-3p FC −7.292, p=0.017; miR-4666a-3p FC −2.805, p=0.022. AUC/adjusted p-values: NR.
Ju et al., 2024 [38]	Plasma; high-throughput RNA sequencing → qPCR validation	CIPN assessed in relation to cumulative FOLFOX exposure (≤3 vs ≥6 cycles)	hsa-miR-3184-5p (down), hsa-miR-222-3p (down in RNA-seq; not significant on qPCR validation)	Fold change and p-values (RNA-seq): miR-222-3p FC −2.546, p=0.010; miR-3184-5p FC −2.665, p=0.025. Diagnostic accuracy for miR-3184-5p: ROC AUC=0.7806; cut-off <0.5450; specificity 75.0% (95%CI 43–95); sensitivity 73.33% (95%CI 45–92). Adjusted p-values: NR.
Łuczkowska et al., 2021 [39]	Plasma; miRNA microarray profiling → qRT-PCR (selected miRNAs)	IMWG-guided clinical assessment using NCI-CTCAE scale	miR-22-3p (up), miR-23a-3p (up), miR-24-3p (up), miR-191-5p (up), miR-92a-3p (up)	ROC/AUC (univariable): miR-22 AUC 0.807, p=0.00000003; miR-24 AUC 0.751, p=0.0001; miR-23a AUC 0.731, p=0.0007; miR-191 AUC 0.67, p=0.0185; miR-92 AUC 0.666, p=0.0191. Multivariable logistic regression (log-

				transformed): OR 10.38 (95%CL 2.23–48.34), p=0.002 for log miR-22; OR 6.17 (1.29–29.47), p=0.019 for log miR-24 (Model 1); OR 33.89 (4.08–281.35), p=0.0008 for log miR-22 and OR 5.78 (1.32–25.15), p=0.016 for log miR-191 (Model 2). Fold change: NR.
Noda-Narita et al., 2020 [40]	Serum; microarray; internal-control normalization; training/test split	PN vs non-PN groups; Bonferroni correction applied (threshold p<0.00012)	15 candidate miRNAs (none meeting Bonferroni threshold); combinations of 3-miRNA formulae evaluated	Per-miRNA metrics (training cohort): |fold change| and Bonferroni-corrected p-values (e.g., miR-451a |FC| 1.01, p=0.103). AUC for 3-miRNA formulae containing miR-451a (test cohort): Formula 3 AUC 0.628; Formula 4 AUC 0.661; corresponding test-cohort sensitivity/specificity/accuracy 70.0/50.0/57.1% and 60.0/66.7/66.4%, respectively. Adjusted p-values: Bonferroni reported; no significant miRNA after correction.
Davey et al., 2023 [36]	NR in available extracted materials for	NR	let-7a, miR-21, miR-145, miR-155, miR-195 (reported as no difference in the	CIPN-specific fold changes/AUC/adjusted p-values: NR in the materials available for extraction.

CIPN-specific effect metrics	review's table)	extracted

NR = not reported in the primary study. Fold changes are reported as provided by each study (log2 scale where specified).

AUC = Area under the receiver operating characteristic curve; **CI** = Confidence interval; **CIPN** = Chemotherapy-induced peripheral neuropathy; **CTCAE** = Common Terminology Criteria for Adverse Events; **NCI-CTCAE** = National Cancer Institute Common Terminology Criteria for Adverse Events; **FC** = Fold change; **IMWG** = International Myeloma Working Group; **miRNA** = MicroRNA; **OR** = Odds ratio; **PN** = Peripheral neuropathy; **qRT-PCR** = Quantitative reverse transcription polymerase chain reaction; **RNA-seq** = RNA sequencing (in this context, typically small RNA sequencing for miRNA profiling); **ROC** = Receiver operating characteristic; **XELOX** = Capecitabine + Oxaliplatin regimen; **FOLFOX** = 5-Fluorouracil + Leucovorin + Oxaliplatin regimen