

**Table S1** Detailed search strategy example in PubMed

Step	Concept	Search terms	Results
1	Wearable devices	“Wearable devices”[TIAB] OR “wearable technology”[TIAB] OR “wearable sensors”[TIAB] OR “wearables”[TIAB]	16,672
2	Sensors	“Sensor”[TIAB] OR “sensors”[TIAB] OR “inertial measurement unit”[TIAB] OR “IMU”[TIAB] OR “accelerometer”[TIAB]	259,741
3	Motor function	“Motor function”[TIAB] OR “motor symptoms”[TIAB] OR “movement disorders”[MeSH] OR “gait”[MeSH]	244,375
4	Other functions	“Activities of daily living”[MeSH] OR “sensation”[MeSH] OR “cognition”[MeSH] OR “electromyography”[MeSH] OR “electroencephalography”[MeSH] OR “neurological rehabilitation”[MeSH] OR “exoskeleton”[TIAB]	965,093
5	Neurological disorders	“Neurology”[MeSH] OR “nervous system diseases”[MeSH] OR “neurological disorders”[TIAB] OR “neurological diseases”[TIAB]	3,099,007
6	Target diseases	“Parkinson disease”[MeSH] OR “stroke”[MeSH] OR “neuromuscular diseases”[MeSH] OR “epilepsy”[MeSH] “neurodegenerative diseases”[MeSH]	182,217
7	Integrate concepts related to technology	#1 OR #2	267,306
8	Integrate concepts related to assessment and rehabilitation	#3 OR #4	1,175,473
9	Integrate concepts related to neurological disorders	#5 OR #6	3,099,007
10	Final	#7 AND #8 AND #9	4,359
11	Filters	2015/1/1-2025/5/31 humans English full text	2,943

Detailed search strategy example in PubMed for wearable device applications in neurological diseases in June 15, 2025.