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Korea's Samsung Electronics develops hip-assist robot to advance fitness in elderly

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EX1, as the robot is called, significantly improves physical functions and balance in older adults



With the advancement of science and technology, robotics have infiltrated numerous sectors, including healthcare. Samsung Electronics Co., in South Korea, has developed EX1, an exercise assistance robot, with the goal to amplify physical function and strength in senior individuals. This advanced robotic aid offers tailored workouts with both assistive and resistive modes, aiming to prevent falls and bolster overall health in this demographic.

Led by Professor Wan-hee Lee from Sahmyook University College of Health Science, Korea, a collaborative team of researchers, Noble County, and Samsung Electronics, assessed the effectiveness of EX1 in executing a four-week combined exercise programme for older adults. Their study unveiled significant findings regarding EX1's role in enhancing exercise outcomes in this demographic.

The findings provide a solid foundation for developing various types of improved and advanced wearable robots. This will further expand the global wearable robot market, promoting further research and commercialisation.