First Beams of the 235 MeV Cyclotron for MGH's Northeast Proton Therapy Centre (NPTC), M. ABS, J.-C. AMELIA, W. BEECKMAN, Y. JONGEN, W. KLEEVEN, M. LADEUZE, G. LANNOYE, S. LAYCOCK, D. LEYMAN, V. POREYE, D. VANDEPLASSCHE, S. ZAREMBA, IBA; M. HEIBERGER, E. HUBBARD, T. HURN, L. NISSLEY, C. SILKE, M. TABOR, GA; K. OHTOMO, M. SANO, T. SATOH, T. TACHIKAWA, T. TAKAYAMA, SHI - IBA has integrated the technologies developed for its low and medium energy cyclotrons into a high energy system dedicated to proton therapy. This system was selected by the Massachusetts General Hospital (MGH) to equip its new NPTC. It includes a 235 MeV isochronous cyclotron, an energy selection system transforming the fixed energy beam extracted from the cyclotron into a variable energy beam, one or more isocentric gantries fitted with a nozzle, two horizontal beam lines, a robotic patient positioning system, a global control system and a global safety management system. The present paper presents the status of the equipment construction, with a particular emphasis on the results of the magnetic field mapping and first beam production.