The binary neutron star merger GW170817 allowed for the first standard siren measurement of the Hubble constant. The amplitude of the gravitational-wave signal provided a measurement of the luminosity distance, while the identification of the host galaxy yielded the redshift. As more binary neutron star mergers are detected in the next few years, one can hope to achieve a measurement of the Hubble constant with an uncertainty of a few percent. The limiting factor in the measurement is expected to be the precision with which one can measure the luminosity distance from the gravitational-wave data. In this talk we discuss another type of gravitational-wave sources that are also expected to produce light, and could thus be used as standard sirens: neutron star black hole mergers. Due to several factors, the amplitude of these gravitational-wave signals, and hence their distance, can be usually measured better than for neutron star binaries. We will show that, depending on the value and orientation of the black hole spin, neutron star black hole mergers can provide a competitive measurement of the Hubble constant.