**Abstract**

Rapid group A *Streptococcus* (GAS) point-of-care testing (POCT) isn’t currently used in the United Kingdom in the management of acute tonsillitis. This prospective, observational study describes a strong association between a molecular-based POCT result and outpatient antibiotic prescribing (odds ratio = 48, p < 0.001) in 339 children seen at our center. It highlights challenges in implementing new rapid diagnostics.