**Clinical Studies**

* [Significant reduction in VAP when using PneuX™ in cardiac surgical patients. 2014.](https://academic.oup.com/ejcts/article/47/3/e92/524144)

This NHS study assessed PneuX™ against standard endotracheal tubes in high risk patients undergoing cardiac surgery. Even during short intubation times, the incidence of pneumonia was significantly lower with PneuX™ than with standard endotracheal tubes (P=0.03).

* [Lower bacteria colonisation rates when PneuX™ is used. 2017.](http://www.journalofhospitalinfection.com/article/S0195-6701(16)30394-2/pdf)

In this study the bacterial colonisation rates of endotracheal tubes were assessed, comparing PneuX™ to standard endotracheal tubes. Endotracheal tubes were in situ for 48 hours. After extubation, endotracheal tubes were sent for bacterial analysis, and results showed lower incidence of bacterial colonisation of PneuX™ endotracheal tubes compared with the standard endotracheal tubes.

* [Significantly lower CPIS score when PneuX™ is used. 2011.](https://link.springer.com/article/10.1007/s00390-010-0211-4)

This study examined the use of PneuX™ in critically ill patients that were ventilated for more than 7 days. They used the CPIS score (a standardised and validated VAP scoring system which reflects lung injury due to infection and chemical damage) to assess VAP rates, comparing PneuX™ to standard endotracheal tubes. The CPIS score was significantly lower with PneuX™ endotracheal tubes compared with standard endotracheal tubes (P<0.05).

* [No episodes of VAP with PneuX™ in situ. 2010.](https://bmcresnotes.biomedcentral.com/articles/10.1186/1756-0500-4-92)

This study assessed PneuX™ in clinical practice, where patients were both initially intubated with PneuX™ or underwent an elective tube exchange from a standard tube to a PneuX™ tube. They found that there were no episodes of VAP whilst the PneuX™ was in situ. Tube exchange was found to be safe and straightforward to perform in this study.