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Title: Comparison of exhaled nitric oxide values measured by two offline methods or NO breath

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Body: BACKGROUND The fraction of exhaled nitric oxide (FeNO) is a useful marker of eosinophilic airway inflammation in asthmatics. The FeNO measurement with two offline methods and NO breath may be more affordable, small number of studies have examined the differences in FeNO values measured with various methods in adult Japanese. METHODS The study population comprised 44 patient (male/female: 14/30; mean age: 51.8±15.0 years; bronchial asthma/other respiratory disorders: 27/17) at our hospital. FeNO value were measured by two offline methods (Sievers and CEIS), NO breath. RESULTS FeNO_{NO breath} value were significantly correlated with those FeNO_{Sievers} (r=0.87) and FeNO_{CEIS} (r=0.89). FeNO_{NO breath} values were nearly equal FeNO_{Sievers} (FeNO_{NO breath}=1.1 x FeNO_{Sievers}), however these values were low compared with FeNO_{CEIS} (FeNO_{NO breath}=0.75 x FeNO_{CEIS})(p=0.02). CONCLUSION Difference exist in the values of FeNO measured by various methods: conversion equations are needed to compare the FeNO values among these three methods.