# ISO/TS 16489:2006-05 (E)

## Water quality - Guidance for establishing the equivalency of results

## Contents

Page


Foreword ..... iv

Introduction ..... v

1 Scope ..... 1

2 Normative references ..... 1

3 Terms and definitions ..... 1

4 Overview of the different approaches ..... 2

5 Amount of data ..... 2

6 Data comparisons ..... 3

7 Comparison of arithmetic means of two independently obtained sets of data ..... 3

8 Comparison of population and sample arithmetic means ..... 4

9 Analysis of variance ..... 5

10 Determination of the equivalence of analytical results obtained from samples from different matrices ..... 7

10.1 General ..... 7

10.2 Determination of the equivalence of the analytical results of real samples using orthogonal regression ..... 7

10.3 Evaluation according to the difference method ..... 9

11 Reporting ..... 10

Annex A (informative) Statistical tables ..... 11

Annex B (informative) Example of a comparison of arithmetic means of two independently obtained sets of data ..... 13

Annex C (informative) Example of a comparison of population and sample arithmetic means ..... 15

Annex D (informative) Example of an analysis of variance ..... 16

Annex E (informative) Examples of a comparison of results from samples of different matrices ..... 18

Annex F (informative) Illustrative examples of graphic plots ..... 24

Annex G (informative) Schematic diagrams ..... 27

Bibliography ..... 29