

CORRELATION STUDY OF ANTI-MULLERIAN HORMONE VALUES ON TWO AUTOMATED ASSAYS (ELECSYS AND ACCESS) REDUCES THE CONSTRAINT FOR INDIVIDUALIZED DOSING WITH REKOVELLE USING THE ALGORITHM

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ABSTRACT

Introduction: A mixed protocol of Menopur and Rekovelle (MARCS study) was used to increase the number of utilizable blastocysts on day 5 and day 6 of embryo culture without increasing ovarian hyperstimulation syndrome (OHSS). An original algorithm was developed to individualize gonadotropin dosing based on Elecsys AMH value. The questions are : Do AMH values correlate between Elecsys and Access II? Can we use the values of AMH measured by Access II assay to individualise Rekovelle dosing?

Methods: We collected serum samples to compare AMH values obtained with two automated immunoassays (Elecsys from Roche and Access II from Beckman Coulter). This comparison was done at two sites: Olive Fertility Centre (48 patients) and Ovo clinic (17 patients). These two sites quantified AMH in house on Access II and sent their samples to CReATe Fertility Centre's laboratory to quantify AMH on Elecsys. Statistical analysis was performed using the GraphPad Prism software, version 5.04, La Jolla, California USA.

Results: Strong correlation was found between the Access II and Elecsys assays carried out at Olive Fertility Centre and CReATe lab, and ovo Labo and CReATe Lab, respectively.

Conclusions: We observed a strong correlation between the results of the Elecsys and the Access II assays for AMH quantification.

OBJECTIVE

The aim of the study was to compare the AMH values measured by two automated assays: Elecsys from Roche and Access II from Beckman Coulter.

METHODS

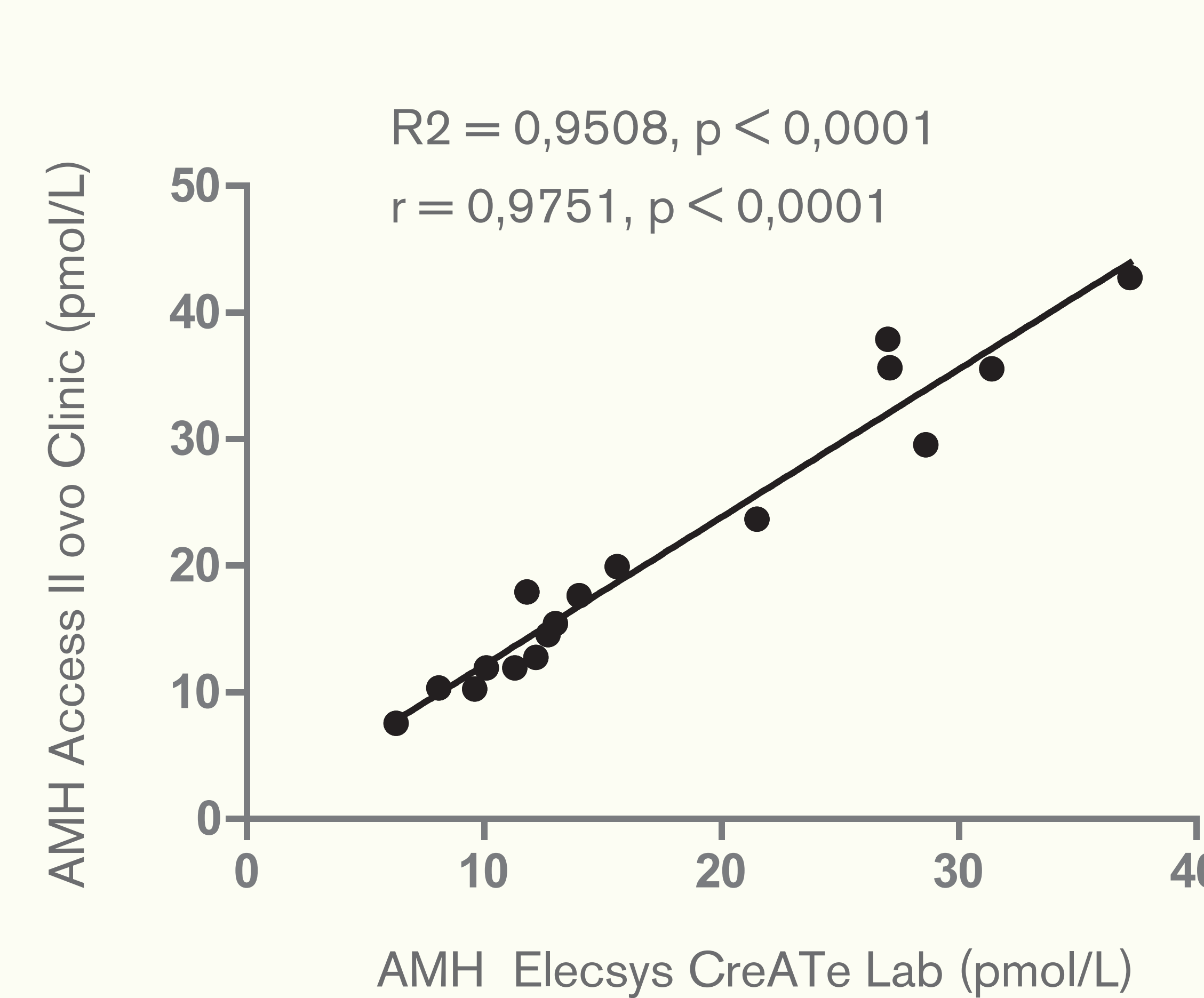
Serum samples were collected to perform analysis of AMH values at two sites: ovo clinic (17 patients) and Olive Fertility Centre (48 patients).

All samples were collected, aliquoted and sent out to be analysed on Elecsys at CReATe Lab. The AMH analysis on Access II was performed respectively at ovo clinic for 17 patients and at Olive Fertility Centre for 48 patients. All AMH values were compared between the two automated assays.

STATISTICS

Statistical analysis was performed using GraphPad Prism. We performed Pearson correlation between the AMH values obtained by Elecsys and Access II.

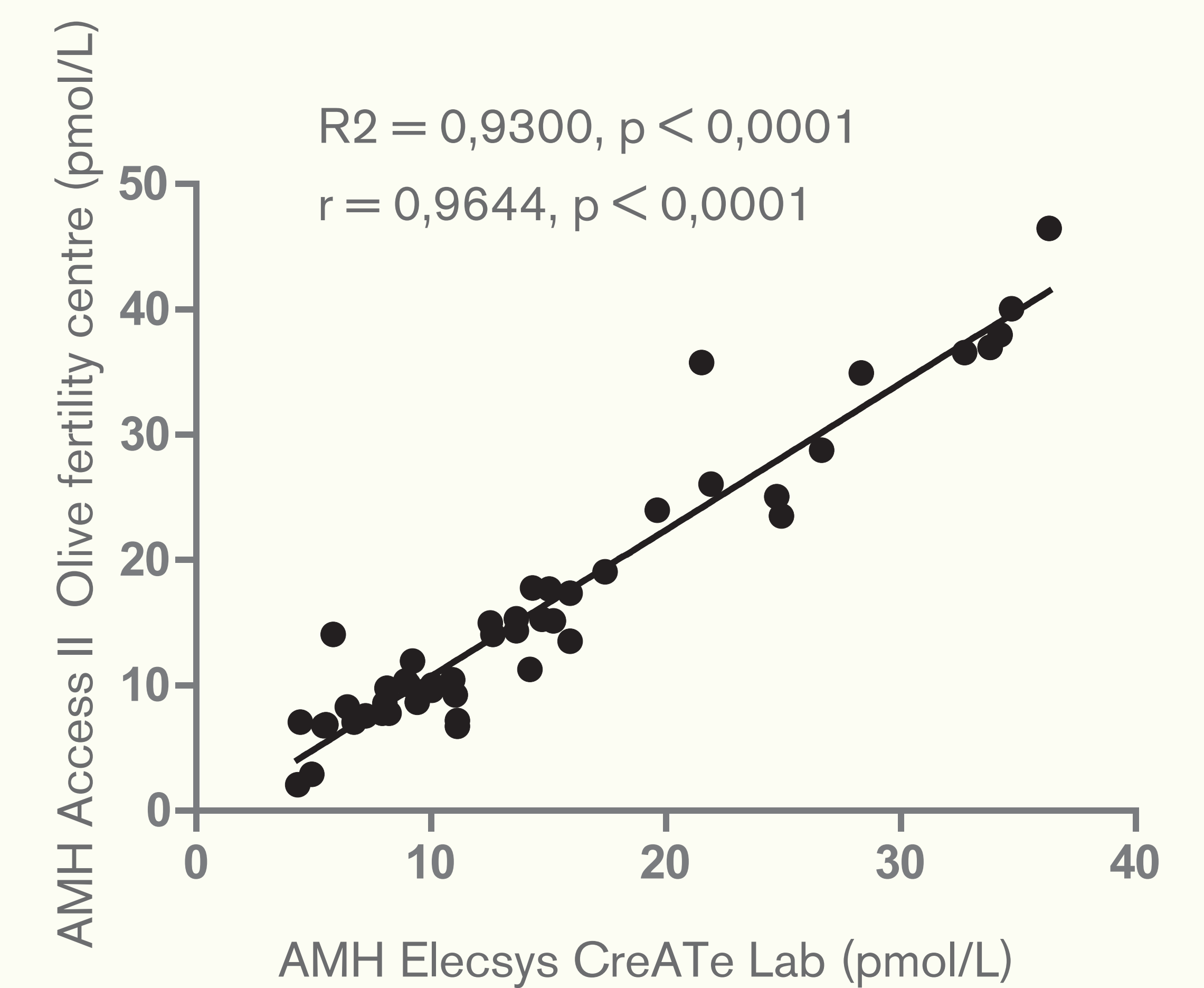
Figure 1. AMH correlation between Elecsys (CReATe Lab) and Access II (Ovo clinic): 17 patients



RESULTS

Figures 1 and 2 show a strong correlation between Elecsys (values from CReATe Lab) and Access II performed respectively on 17 patients at ovo labo (R2 = 0.9508, p<0.0001, and Pearson r=0.9751, p<0.0001) and 48 patients at Olive Fertility Centre (R2 =0.9300, p<0.0001, and Pearson r= 0.9644, p<0.0001).

Figure 2. AMH correlation between Elecsys (CReATe Lab) and Access II (Olive Fertility Centre): 48 patients



CONCLUSIONS

In this study, we observed a strong correlation between the AMH values obtained by Elecsys and Access II assays. We concluded that we could use Access II AMH values to individualize Rekovelle dosing similar to Elecsys AMH values.

Serum samples were collected to perform analysis of AMH values at two sites: ovo clinic (17 patients) and Olive Fertility Centre (48 patients).

All samples were collected, aliquoted and sent out to be analysed on Elecsys at CReATe Lab. The AMH analysis on Access II was performed respectively at ovo clinic for 17 patients and at Olive Fertility Centre for 48 patients. All AMH values were compared between the two automated assays.

STATISTICS