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Introduction

Iohexol (Omnipaque®) is a non-radioactive, water-soluble, iodinated radiographic contrast medium, commonly used in **medical imaging**. This well known X-ray contrast medium is widely used worldwide, considered as a economical, easily available and safe.

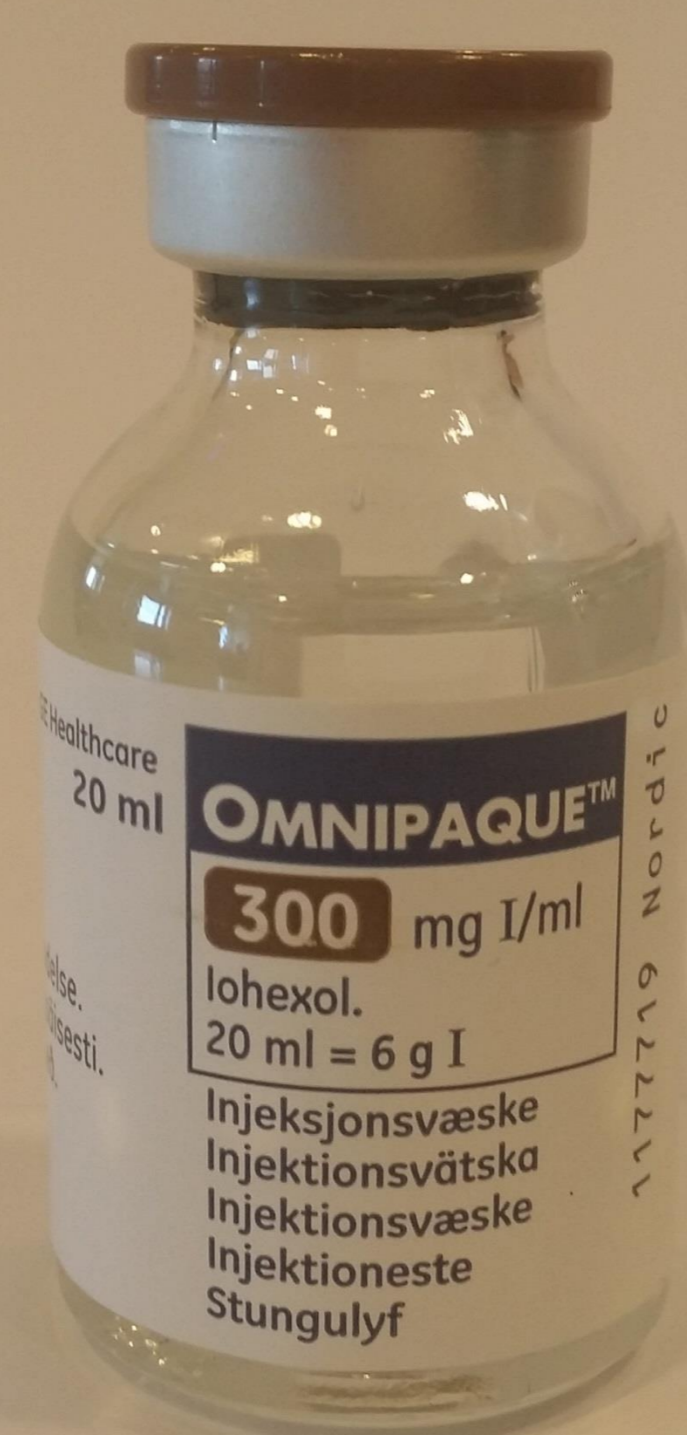
This contrast agent is frequently used as a marker for **glomerular filtration rate** in both humans and animals such as dogs and cats. More recently, it has also been used to test **intestinal permeability** in humans, dogs, horses and rats.

Aim of study

To determine whether the **FIT-GFR Iohexol Kit (ELISA)** may be used for the **measurement of iohexol in equine plasma**, and to compare such results with the **high-performance liquid chromatography (HPLC)**, which is regarded as the gold standard for measuring iohexol

Materials and Methods

Blank and iohexol-containing plasma samples (n=100) from healthy horses were collected from the left jugular vein in vacuumed clot tubes before and after nasogastric tube application of 1.0 mL iohexol/kg as a 10 % solution.



Acknowledgements

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Results

Results from this study showed that the correlation coefficients when comparing **ELISA vs. HPLC** (r=0.92) was all excellent.

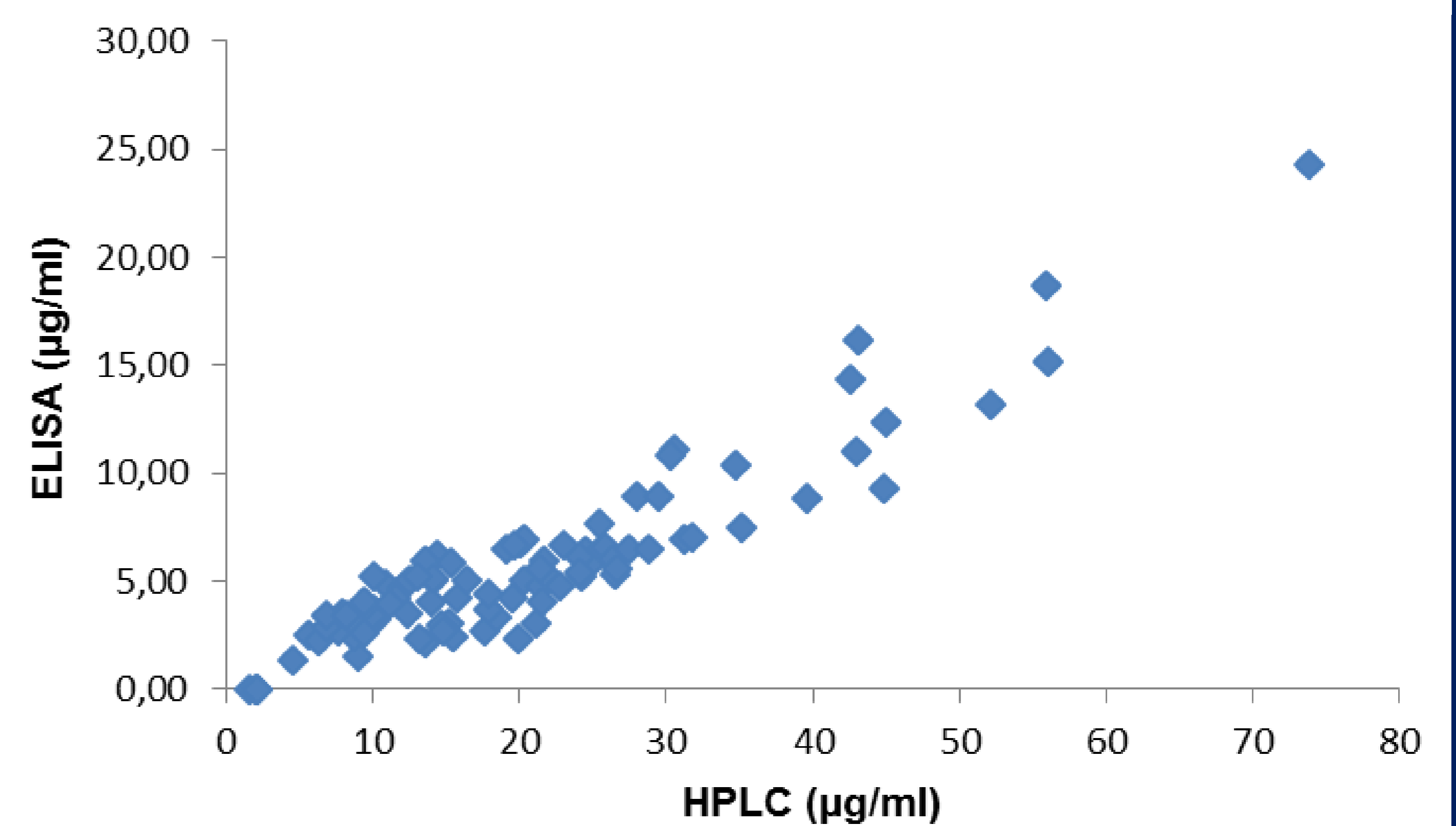
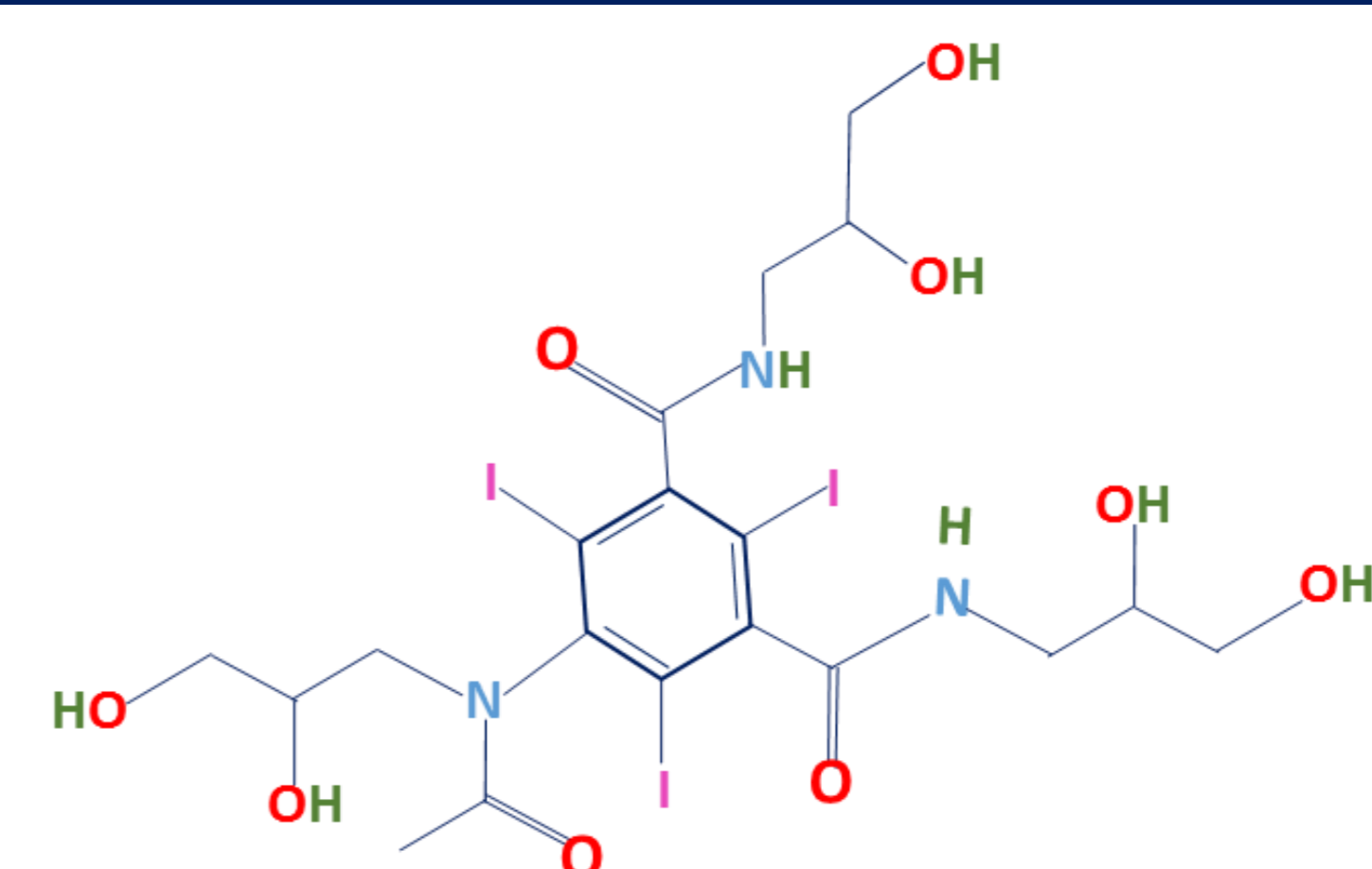


Fig. The iohexol concentration (µg/ml) in collected equine plasma samples measured by ELISA and HPLC.



CONCLUSIONS

- ✓ Results from our study demonstrate that **measurement of iohexol from equine plasma using the ELISA Kit is as accurate and reproducible as using HPLC.**
- ✓ Furthermore, it was concluded that using ELISA Kit instead of HPLC for measuring iohexol is more beneficial for practical and cost-effective reasons.

References

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