

Supplementary material for: “Modeling three sources of uncertainty in assisted reproductive technologies with probabilistic graphical models”

Jerónimo Hernández-González<sup>1</sup>, Olga Valls<sup>1</sup>, Adrián Torres-Martín<sup>2</sup>, and Jesús Cerquides<sup>3</sup>

<sup>1</sup>*Department of Mathematics and Computer Science, University of Barcelona, Barcelona, Spain*

<sup>2</sup>*Department of Information and Communications Engineering, Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Spain*

<sup>3</sup>*Artificial Intelligence Research Institute (IIIA-CSIC), Bellaterra, Spain*

## 1 Densities

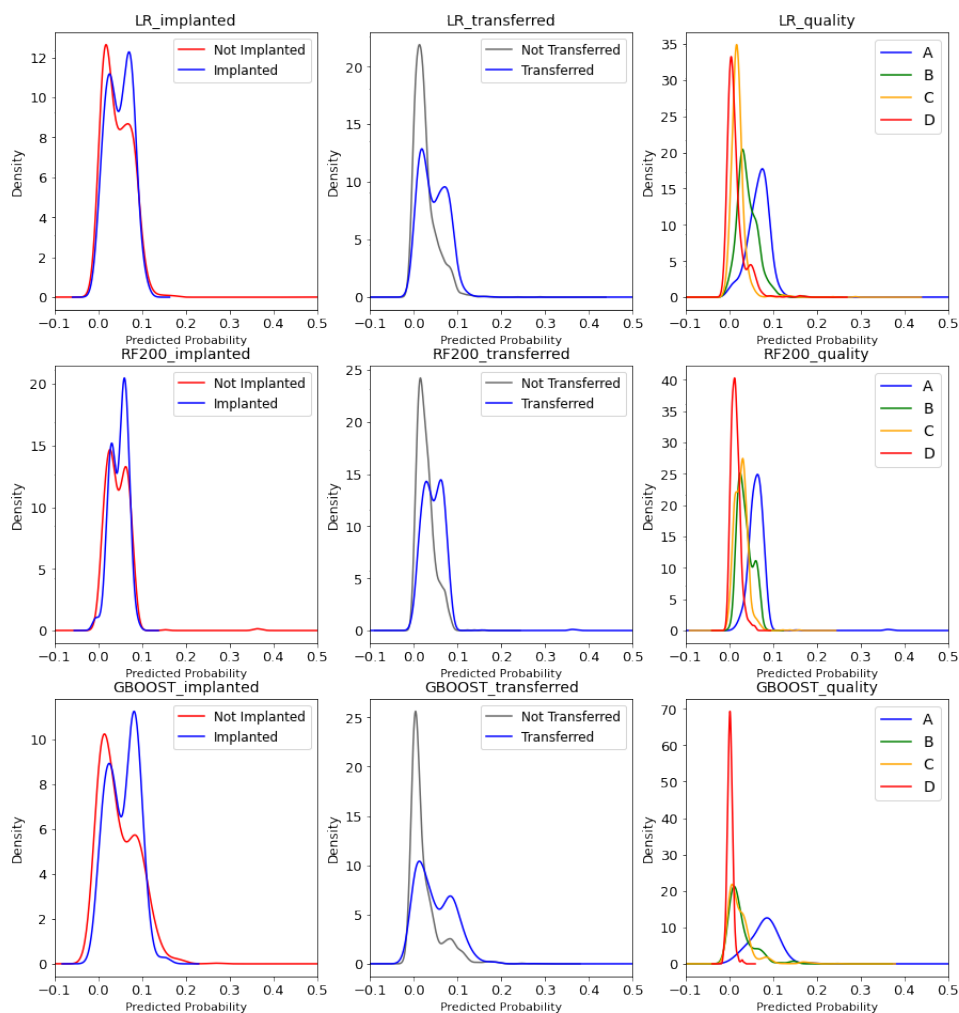


Figure 1: Experiment #1: Density of the predicted probabilities for classifiers learnt with the *Pessimistic* baseline approach. Each row shows results with different types of base classifiers. Each column shows different densities from different groupings of embryos: (i) embryos grouped by real label (left column), (ii) by transfer (middle column) (iii) and by ASEBIR category (right column).

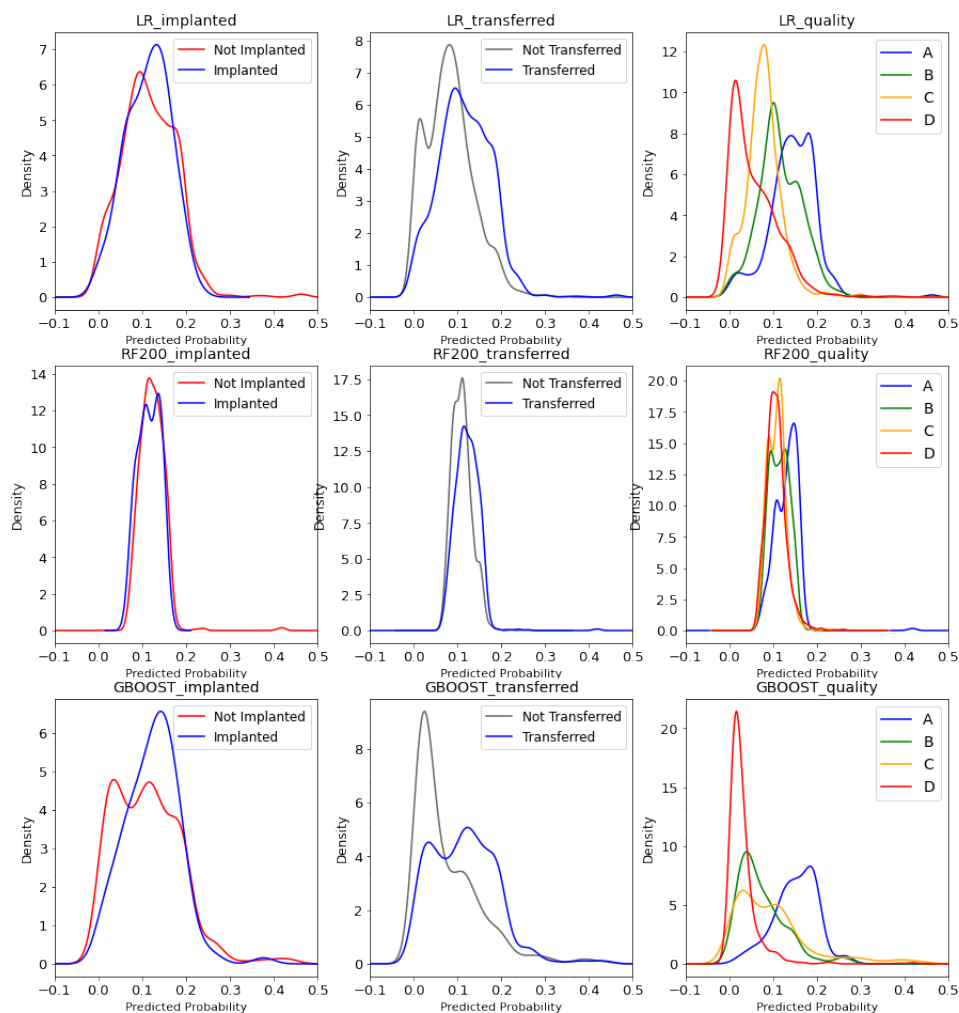


Figure 2: Experiment #1: Density of the predicted probabilities for classifiers learnt with the *Simple EM* baseline approach. Each row shows results with different types of base classifiers. Each column shows different densities from different groupings of embryos: (i) embryos grouped by real label (left column), (ii) by transfer (middle column) (iii) and by ASEBIR category (right column).

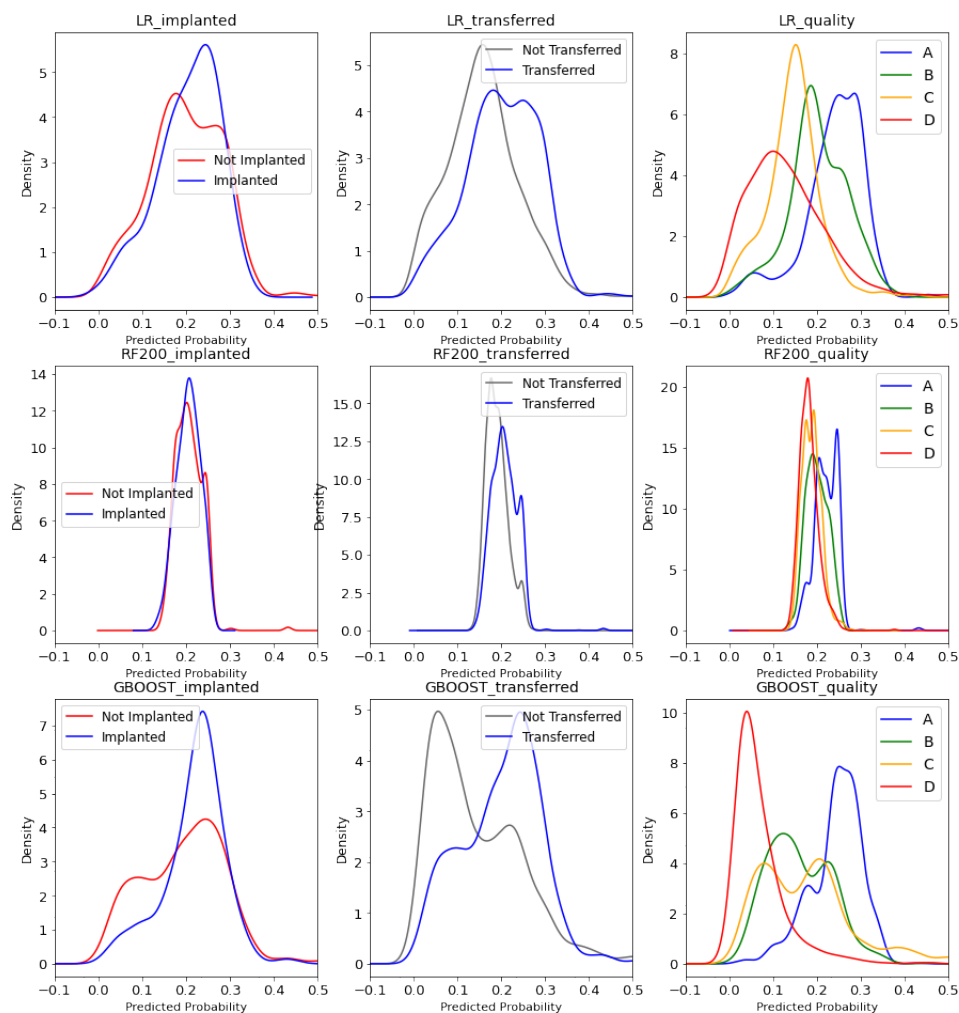


Figure 3: Experiment #1: Density of the predicted probabilities for classifiers learnt with the *LP-EM* baseline approach. Each row shows results with different types of base classifiers. Each column shows different densities from different groupings of embryos: (i) embryos grouped by real label (left column), (ii) by transfer (middle column) (iii) and by ASEBIR category (right column).

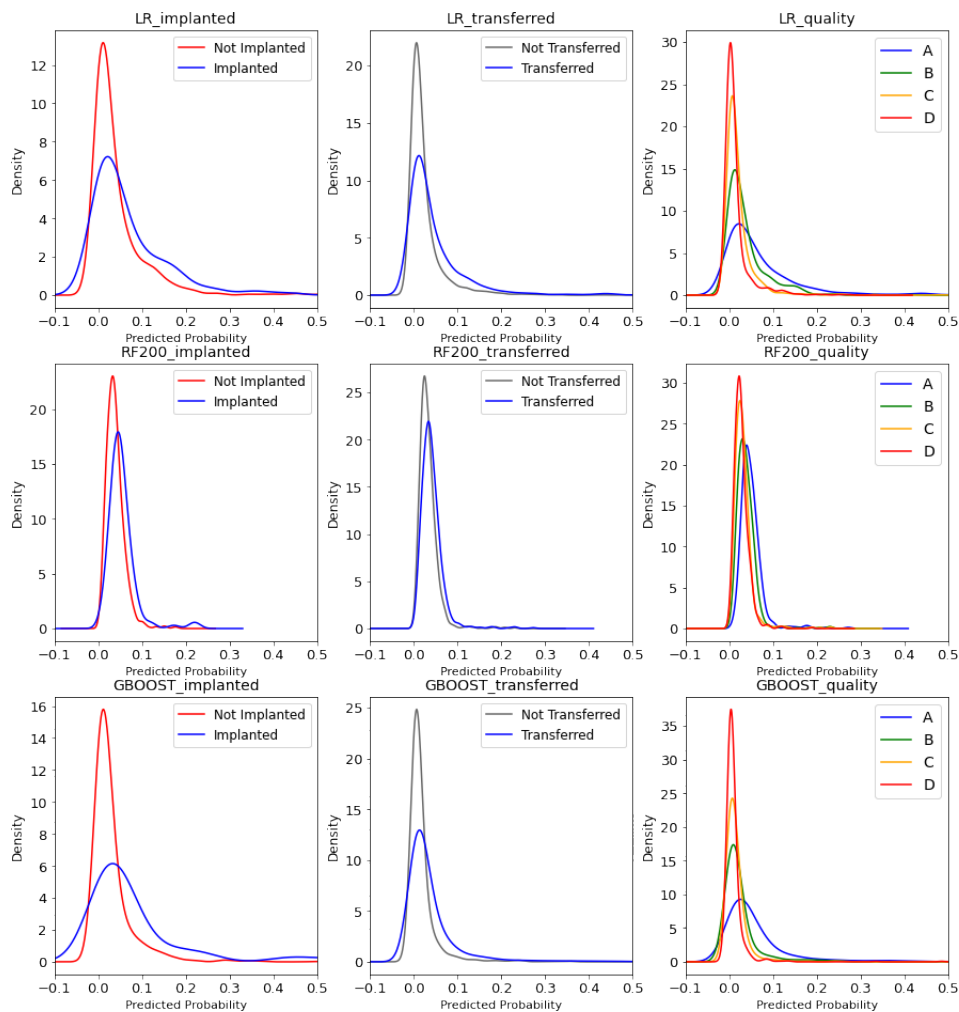


Figure 4: Experiment #2: Density of the predicted probabilities for classifiers learnt with the *pessimistic* baseline approach, when using a dataset enlarged with the descriptive features of the cycle. Each row shows results with different types of base classifiers. Each column shows different densities from different groupings of embryos: (i) embryos grouped by real label (left column), (ii) by transfer (middle column) (iii) and by ASEBIR category (right column).