MicroRNA holds clues to why some mammals are cancer-prone

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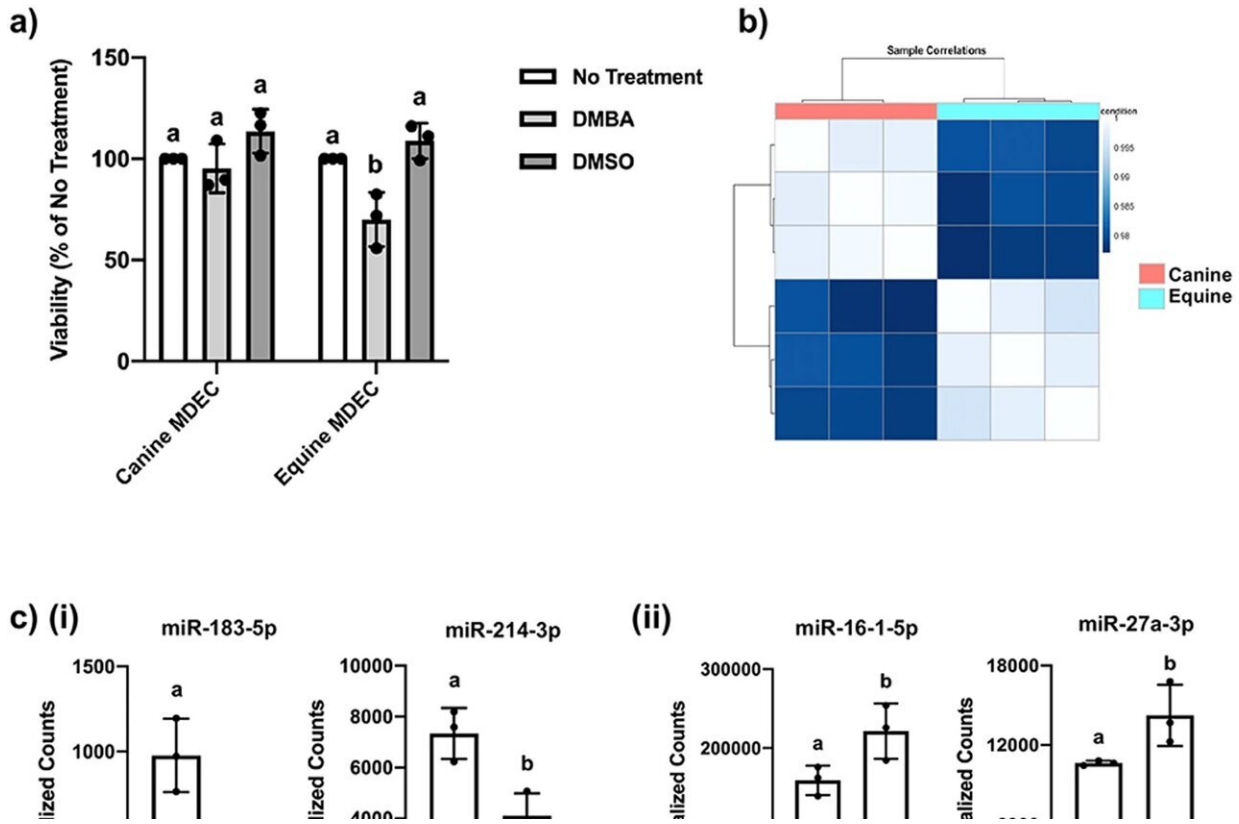

Canine and equine mammosphere-derived epithelial cells (MDECs) respond differently to 7, 12-Dimethylbenz(a)anthracene (DMBA) and have distinct microRNA (miRNA) expression patterns. **a** Viability of canine and equine MDECs after treatment with 5 μM DMBA or the vehicle control, dimethylsulfoxide (DMSO). **b** Correlation matrix of miRNA expression in canine and equine MDECs (n = 3 individual cell cultures/species) showing that miRNA expression patterns in cells from the same species are more closely related than those from different species. **c** Normalized counts of miRNAs of

interest that were detected at either (**i**) higher or (**ii**) lower expression levels in canine compared to equine MDEC in miRNA sequencing analysis. **d** Quantitative reverse transcription-polymerase chain reaction (qRT-PCR) analysis of the miRNAs of interest depicted in **c**. $n = 3$. Error bars show standard deviations. Different letters above the bars indicate statistically significant differences. *P*