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## Background

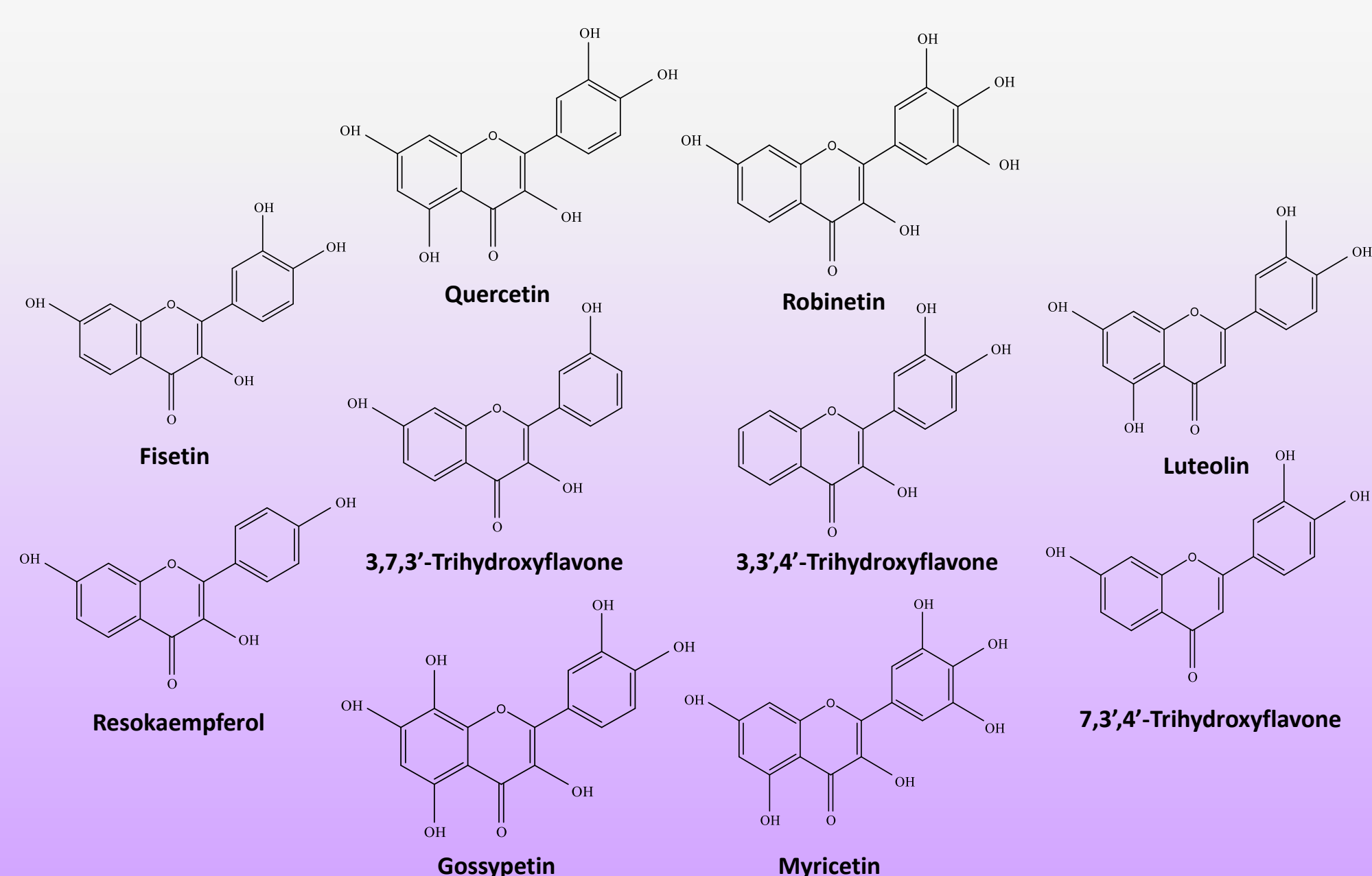
Osteosarcoma is the most common primary bone tumour, and despite having conventional treatment, the survival rate has not changed in decades.

Flavonoids are phenolic compounds with well-described antioxidant, anti-inflammatory, and anticancer properties.

## Aims

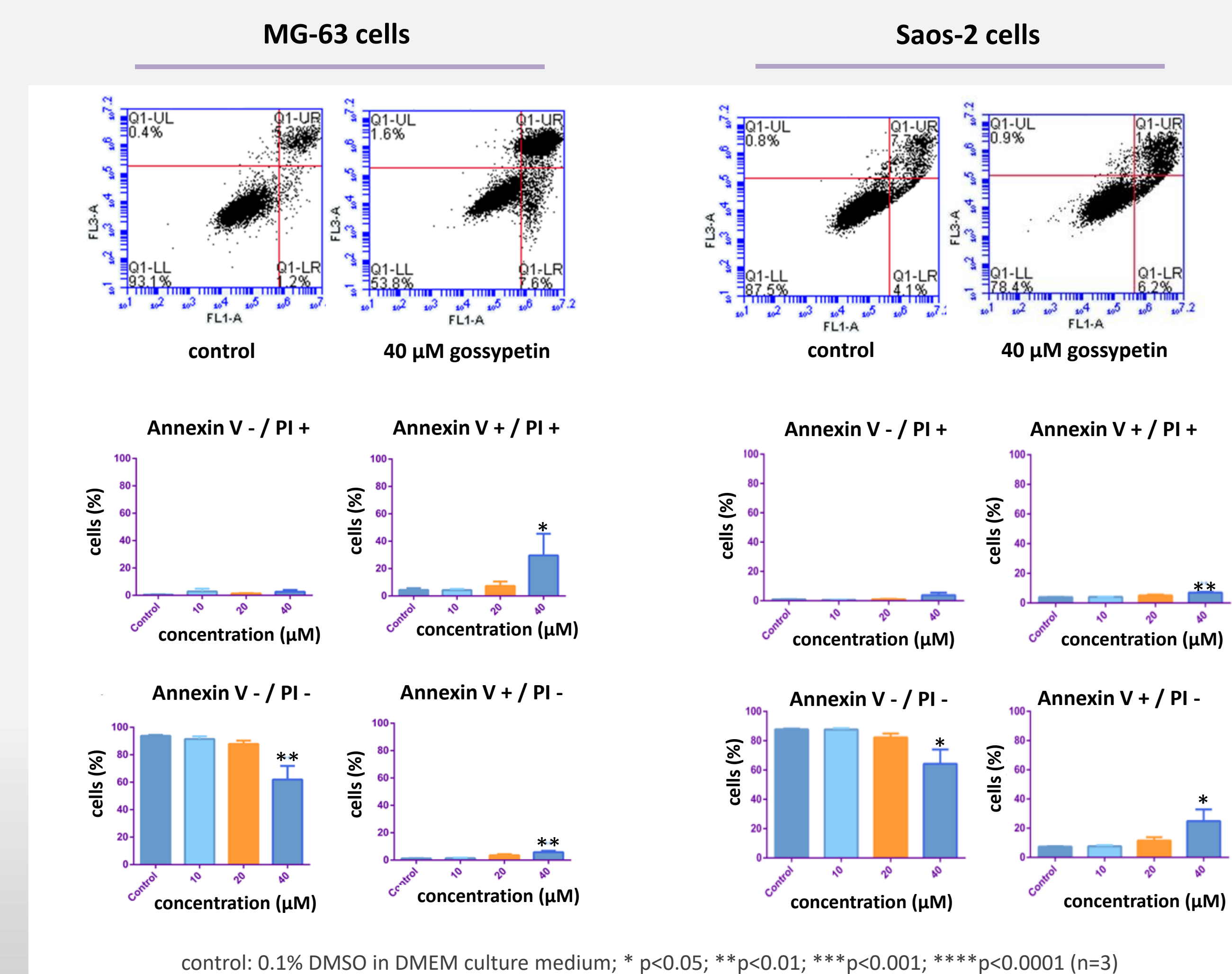
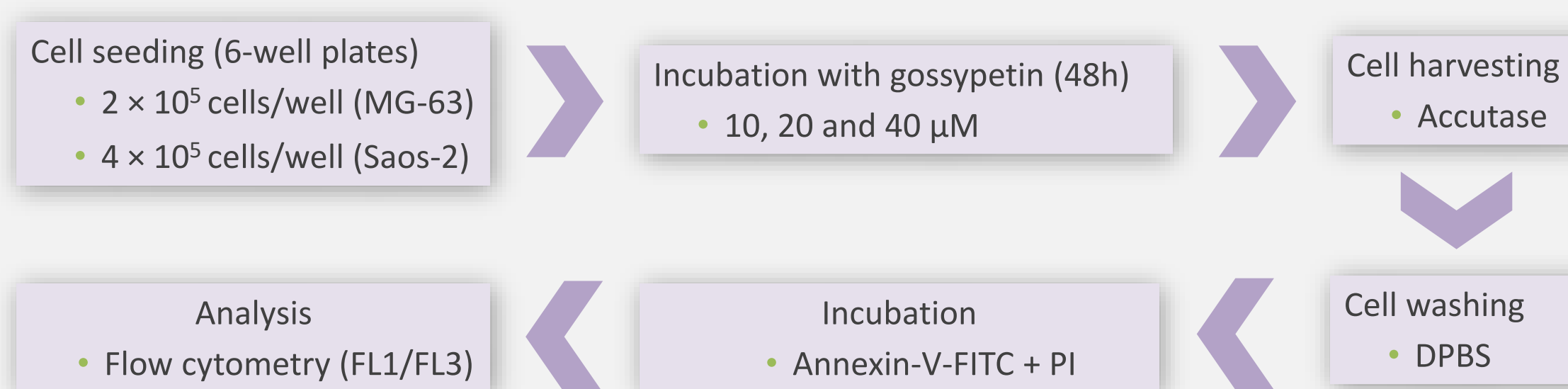
- To evaluate the effect of polyhydroxylated flavones on the cell viability of p53-deficient MG-63 and Saos-2 human osteosarcoma cell lines;
- To investigate apoptotic effects (phosphatidylserine externalization) of the most cytotoxic compound.

## Compounds



## Apoptosis

### Annexin V - Propidium Iodide (PI) assay



Gossypetin (40 μM, 48h) increased phosphatidylserine externalization (annexin V binding)

## Conclusions

- Gossypetin showed the highest cytotoxicity to both cell lines
- At higher concentrations, gossypetin induced apoptosis in these p53-deficient cell lines

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## Cell viability

### Sulforhodamine B (SRB) assay (stoichiometric binding of SRB to proteins)

