



# The effect of sunthetic oligonucleotides on human neutrophils

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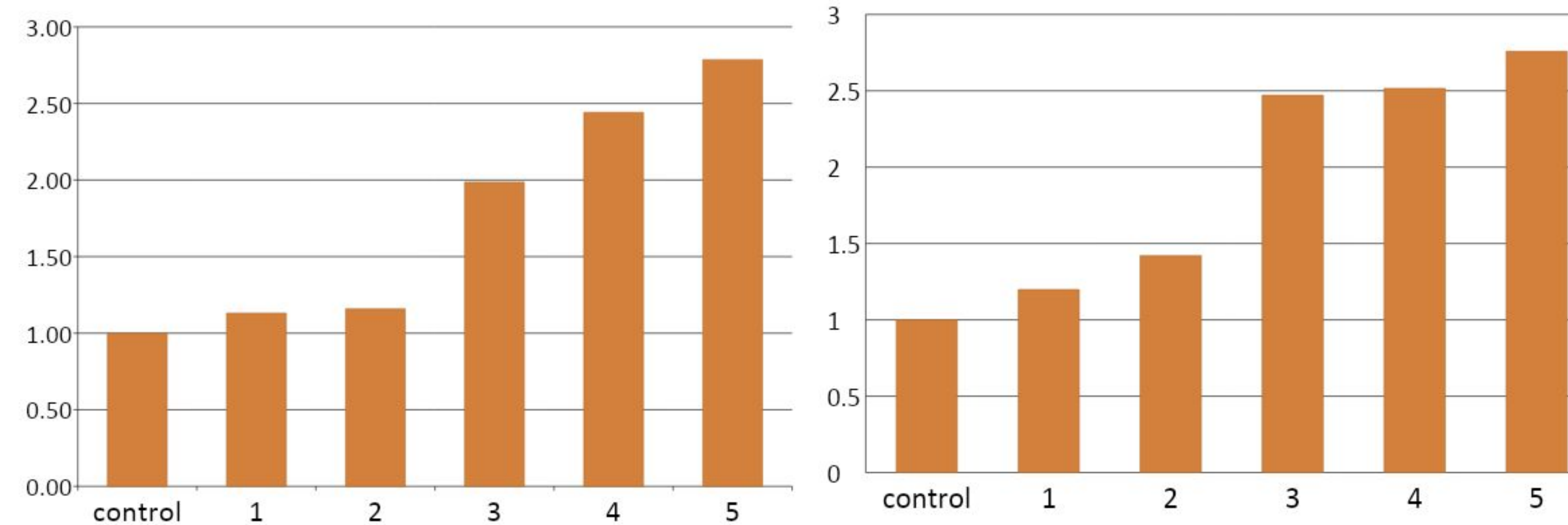
## Introduction

## Results

## Materials and Methods

Neutrophils were separated from other cells of human's blood. The cells in concentration  $2 \cdot 10^6$  cells/ml were incubated in RPMI with 10% FBS and with the addition of different oligonucleatides (T=37°C; CO<sub>2</sub> = 5%). An amount of apoptosis cells was registered by flow cytometry with help propidium iodide(PI).

A number of reactive form of oxygen(ROS) was registered by spectrofluorometry with help fluorescein derivatives, which oxidized in cells and turn into fluorescent product.



**Fig.1** Correlation between amount of apoptosis cells and number of repeats T(TAGGG)<sub>n</sub> (n=1,2,3,4,5) After 4 hours of incubation.

**Fig.2** Correlation between amount of apoptosis cells and number of repeats T(TAGGG)<sub>n</sub> (n=1,2,3,4,5) After 18 hours of incubation.

## Aims

- Investigate action of ODN on neutrophils apoptosis
- Demonstrate effect of ODN on superoxide production

## Conclusions

- Action of ODN on neutrophil's apoptosis was demonstrated.
- Correlation between apoptotic cells and length of ODN was shown
- Influence of ODN on superoxide production was revealed