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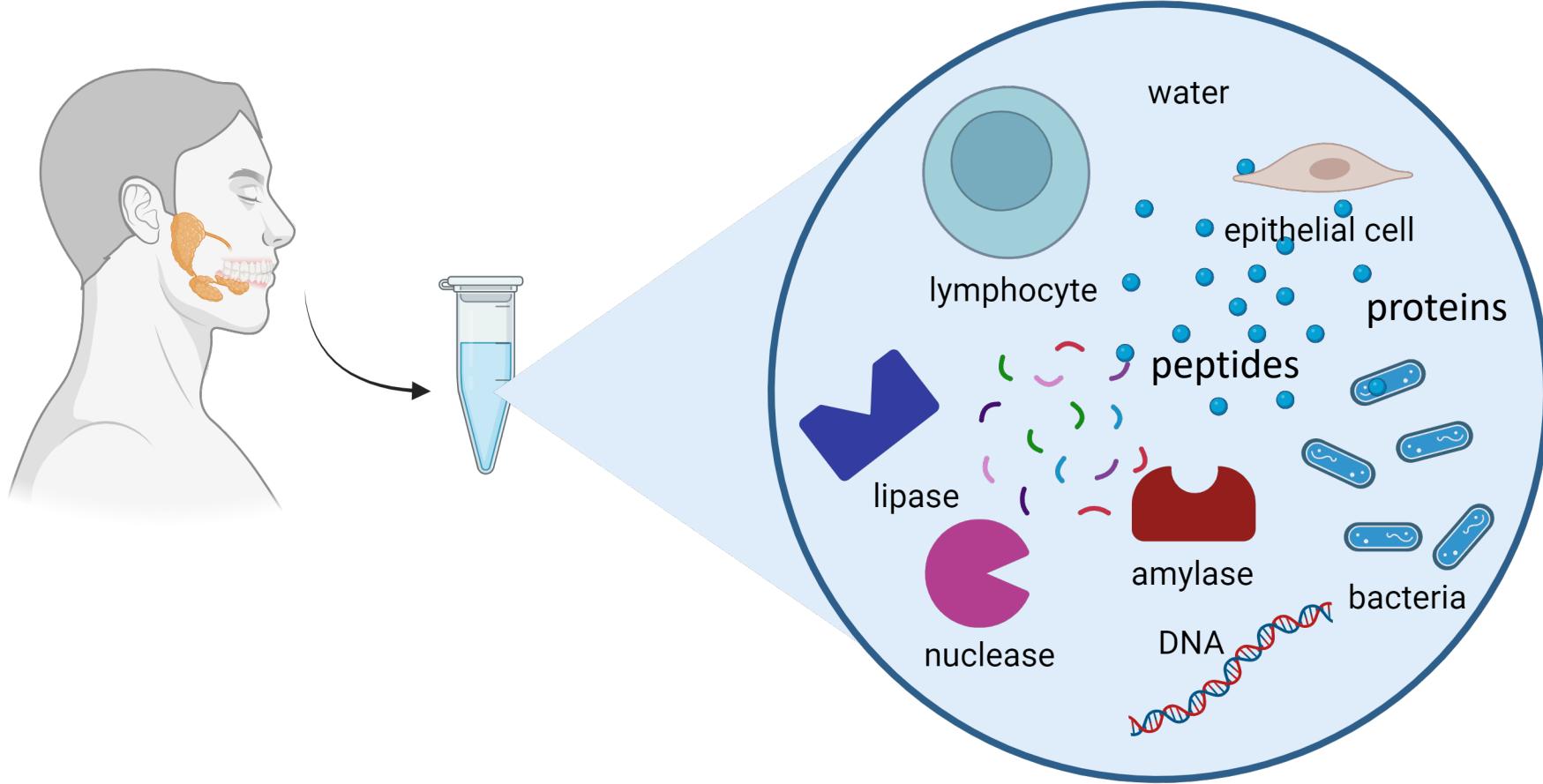
FACULTY OF MEDICINE
Comenius University
Bratislava

Extracellular DNA in saliva is protected from cleavage by DNase I

Ľubica Janovičová, Dominika Holániová, Barbora Vlková, Peter Celic

Institute of Molecular Biomedicine, Faculty of Medicine, Comenius University,
Bratislava, Slovakia



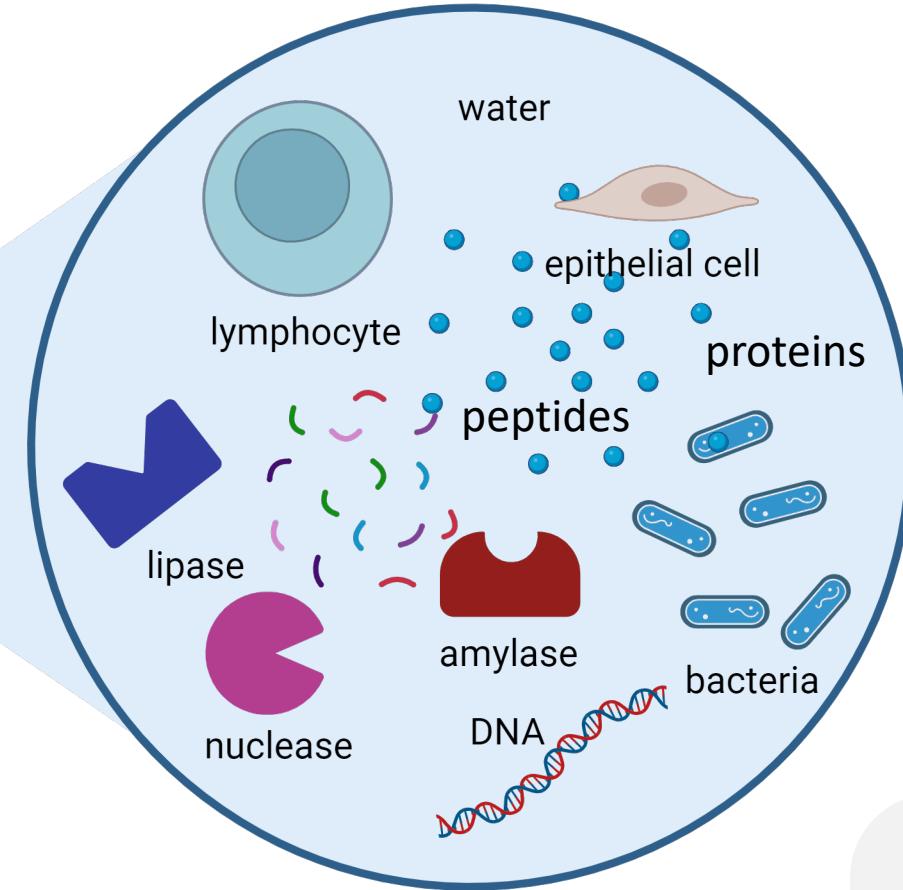
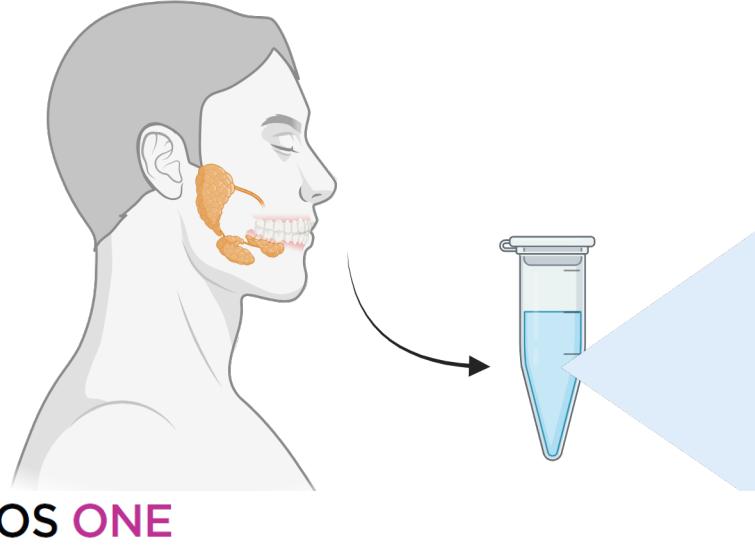


RESEARCH ARTICLE

Isolation of salivary cell-free DNA for cancer detection

Patricia J. Brooks¹, Ethan Z. Malkin^{1,2}, Steven De Michino^{1,2}, Scott V. Bratman^{1,2,3*}¹ Princess Margaret Cancer Centre, University Health Network, Toronto, ON, Canada, ² Department of Medical Biophysics, Temerty Faculty of Medicine, University of Toronto, Toronto, ON, Canada, ³ Department of Radiation Oncology, Temerty Faculty of Medicine, University of Toronto, Toronto, ON, Canada

Salivary Biomarkers for Oral Squamous Cell Carcinoma Diagnosis and Follow-Up: Current Status and Perspectives

Marta Cristaldi¹, Rodolfo Mauceri^{1,2}, Olga Di Fede¹, Giovanna Giuliana¹, Giuseppina Campisi^{1*} and Vera Panzarella¹¹ Department of Surgical, Oncological and Oral Sciences, University of Palermo, Palermo, Italy, ² Department of Biomedical and Dental Sciences and Morphofunctional Imaging, University of Messina, Messina, Italy

Article

Extracellular DNA and Markers of Neutrophil Extracellular Traps in Saliva from Patients with Periodontitis—A Case–Control Study

Alexandra Gaál Kovalčíková¹ Bohuslav Novák², Oksana Roshko³, Eva Kovalčová³, Michal Pastorek⁴, Barbora Vlková⁴ and Peter Celec^{4,5,*}

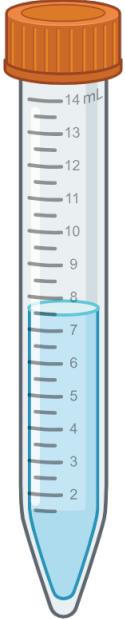
- ¹ Department of Pediatrics, National Institute of Children's Diseases and Faculty of Medicine, Comenius University in Bratislava, 83340 Bratislava, Slovakia; alexandra.kovalcikova114@gmail.com
- ² Department of Stomatology and Maxillofacial Surgery, Faculty of Medicine, Comenius University, 81250 Bratislava, Slovakia; bohuslav.novak@fm.uniba.sk
- ³ Department of Dental Hygiene, Faculty of Health Care, Prešov University, 08001 Prešov, Slovakia; oksana.roshko@unipo.sk (O.R.); kovalova@nextra.sk (E.K.)
- ⁴ Institute of Molecular Biomedicine, Faculty of Medicine, Comenius University, 81108 Bratislava, Slovakia; michal.pastorek@imbm.sk (M.P.); barbora.vlkova@imbm.sk (B.V.)
- ⁵ Institute of Pathophysiology, Faculty of Medicine, Comenius University, 81108 Bratislava, Slovakia

sources of DNA

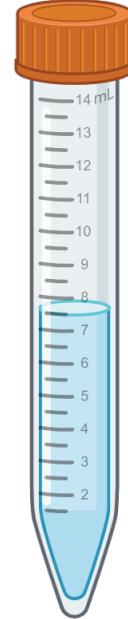


Aim

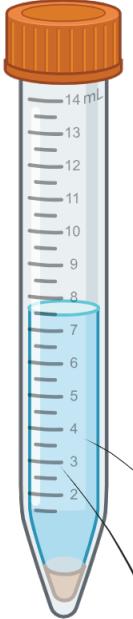
- to analyze the effects of the centrifugation and freezing of saliva samples from healthy volunteers



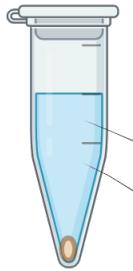
1600xg
4°C
10 min



1600xg
4°C
10 min



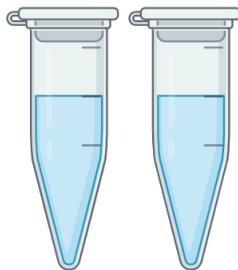
16 000xg
4°C
10 min



pellet for
isolation

saliva

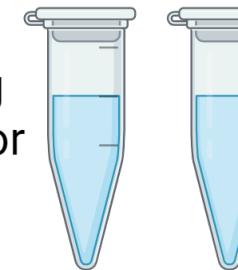
1600xg
aliquot for
isolation



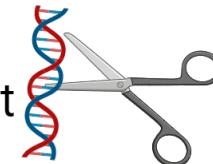
+ aliquot for
DNase I treatment

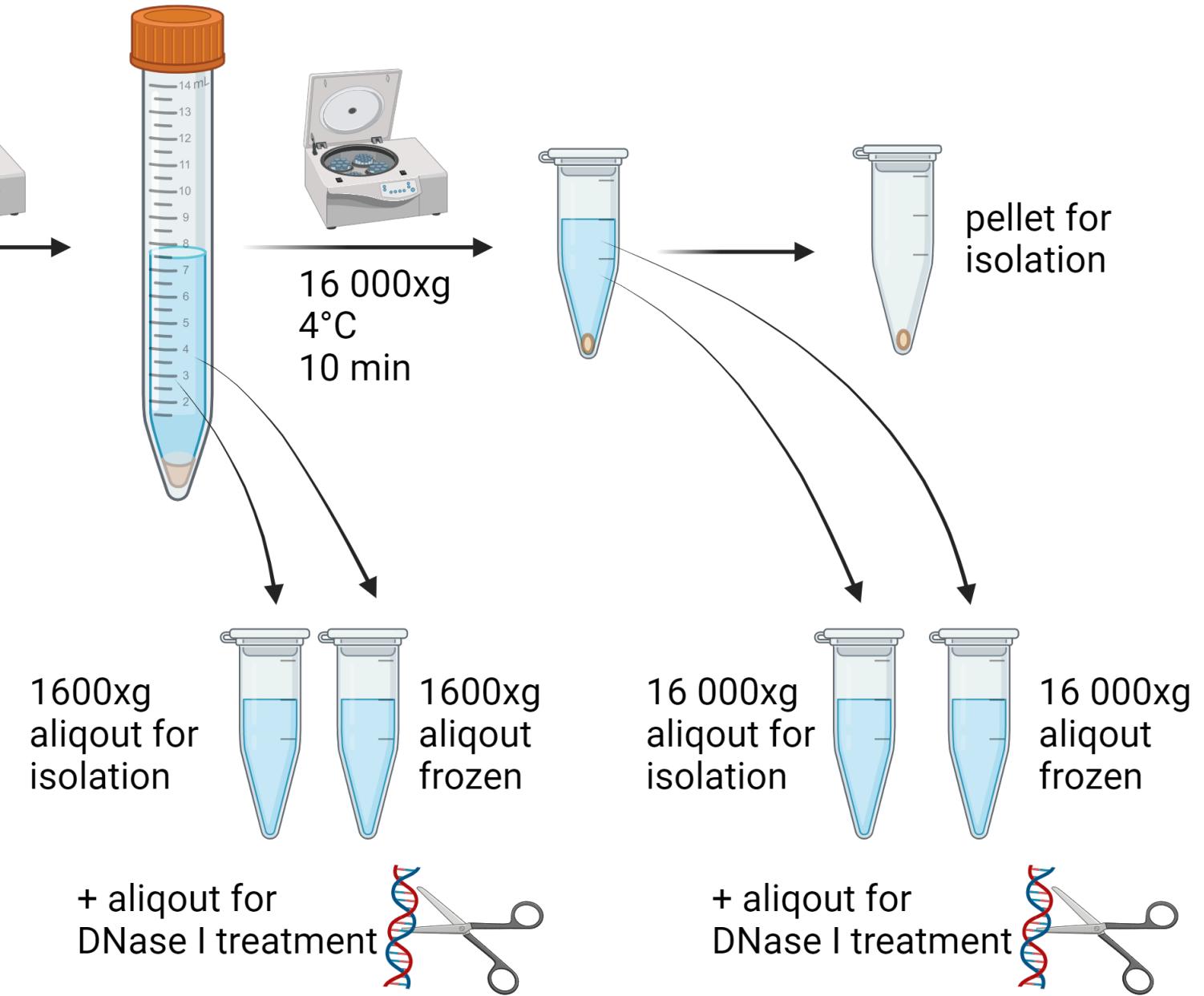


16 000xg
aliquot for
isolation

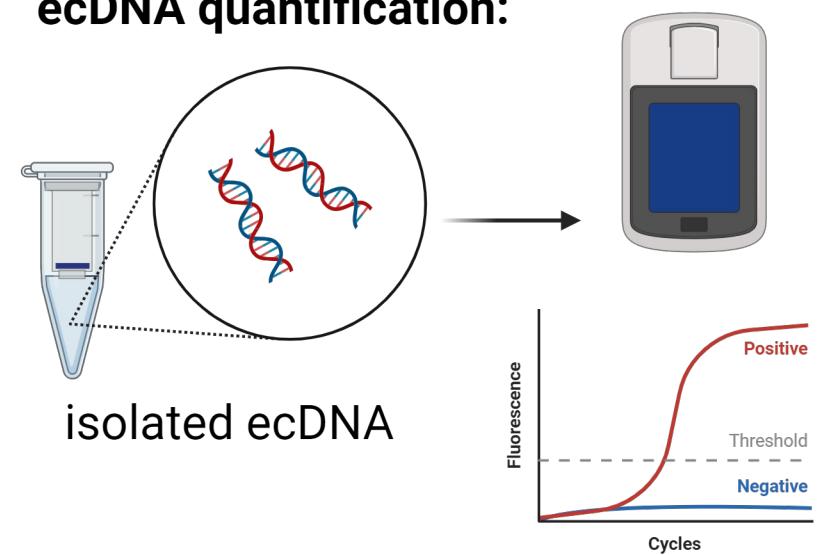


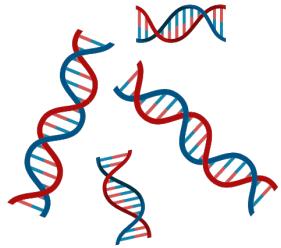
+ aliquot for
DNase I treatment



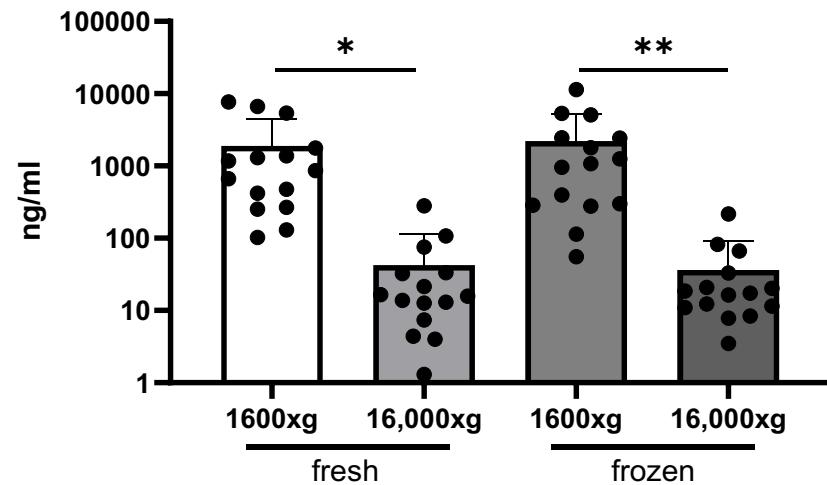


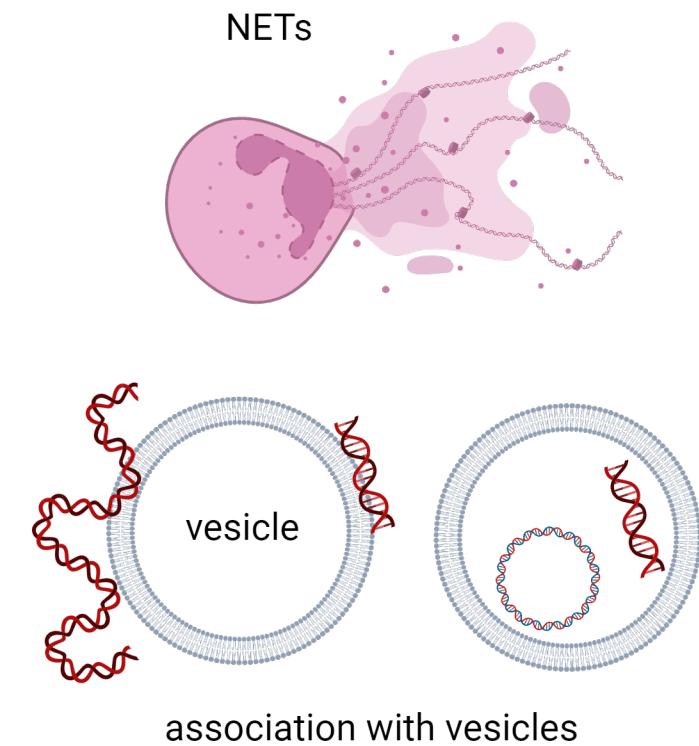
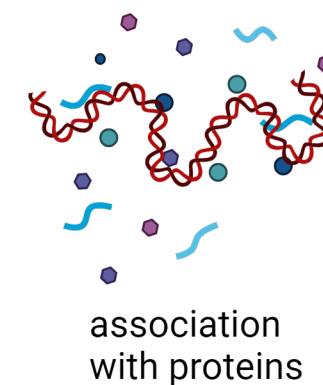
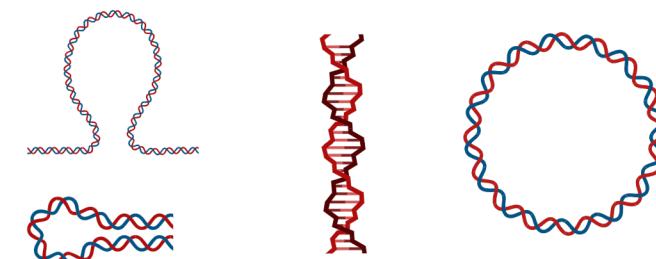
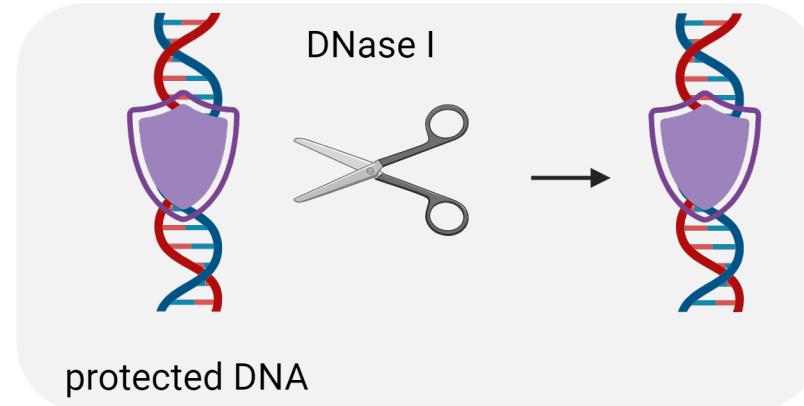
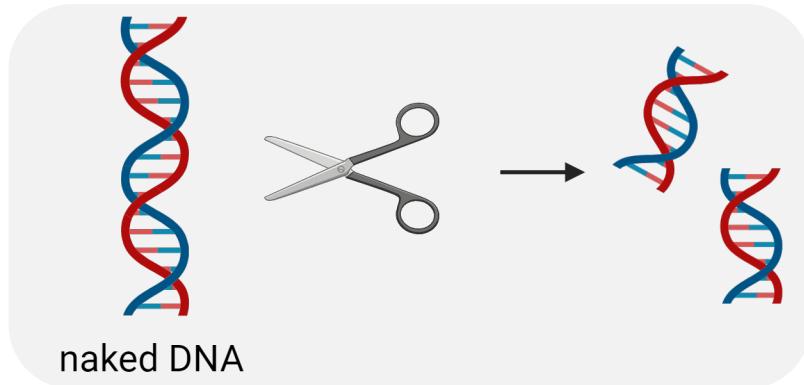
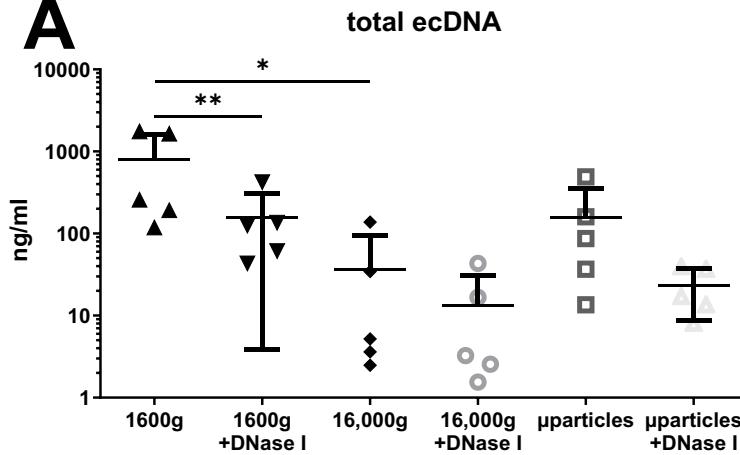
ecDNA quantification:

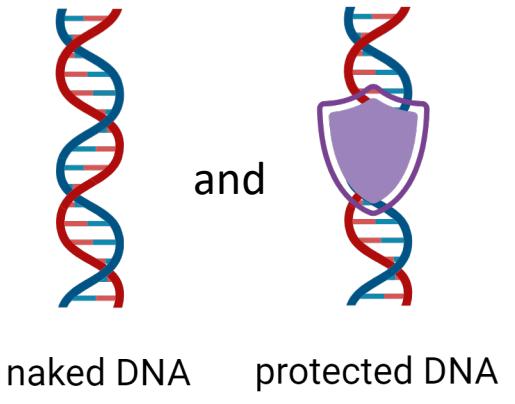




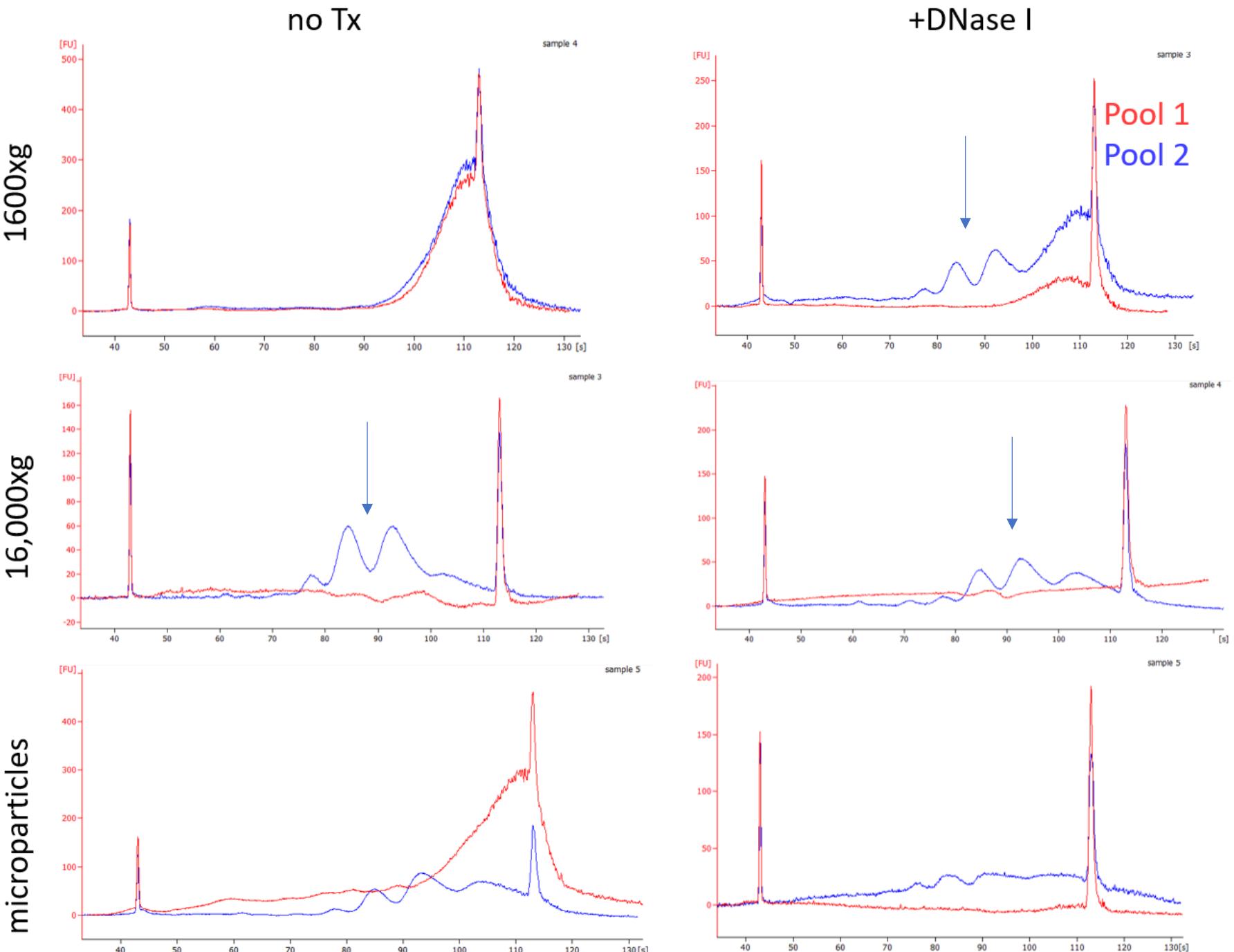
total ecDNA



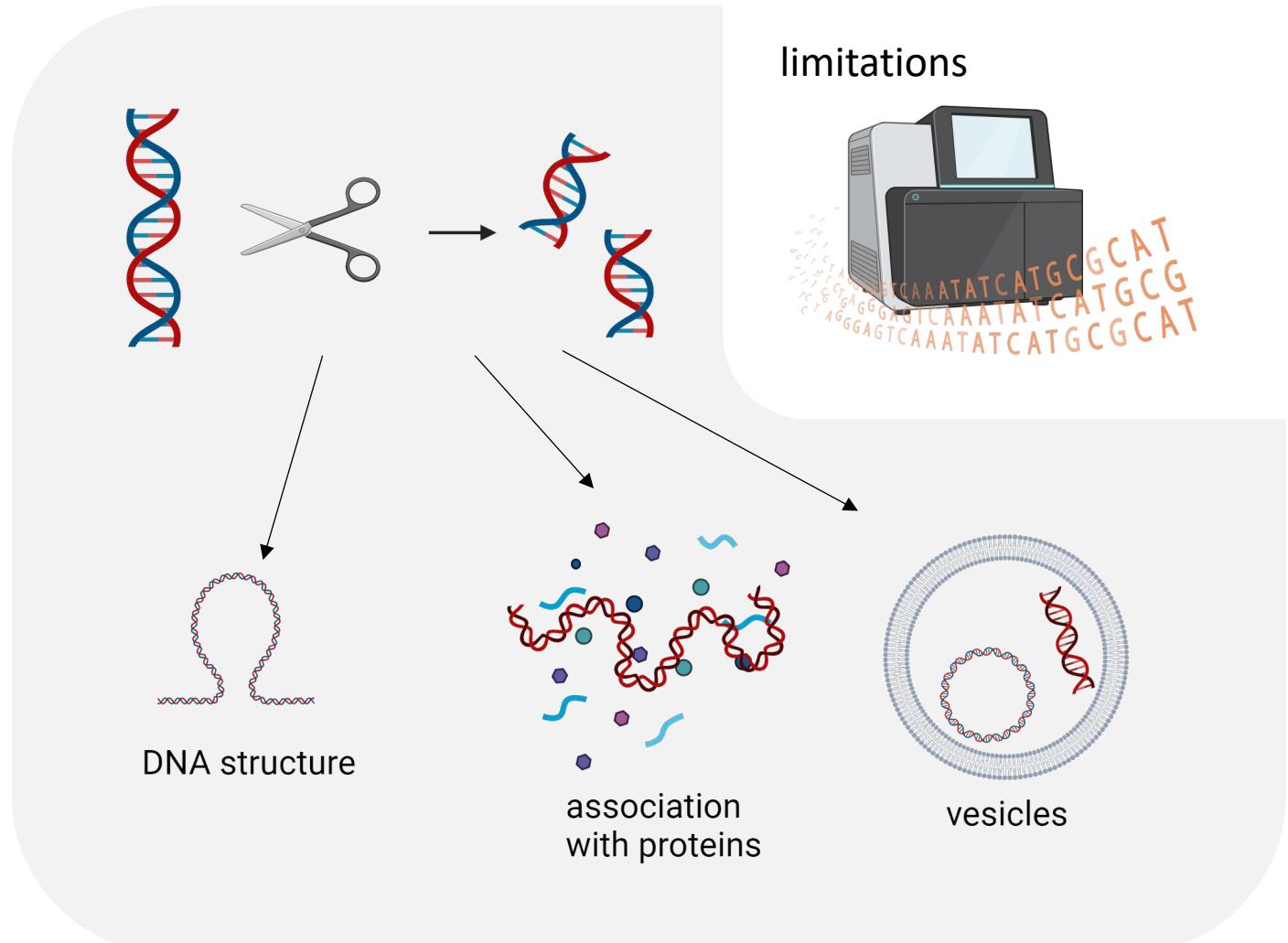
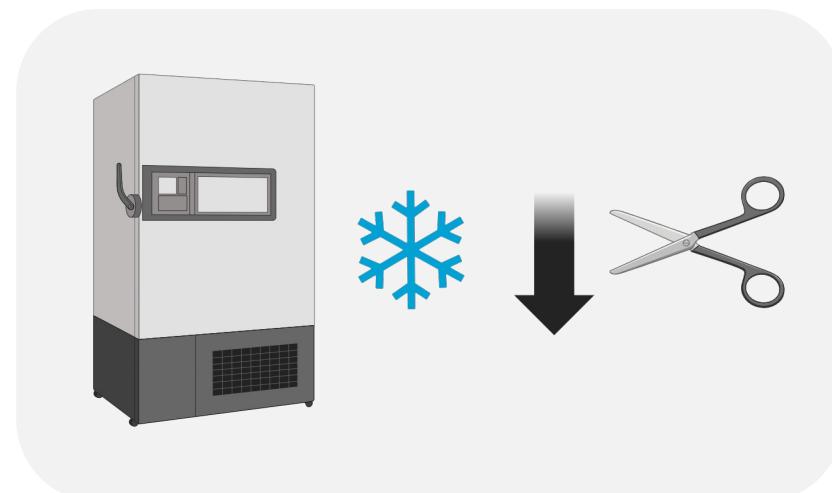
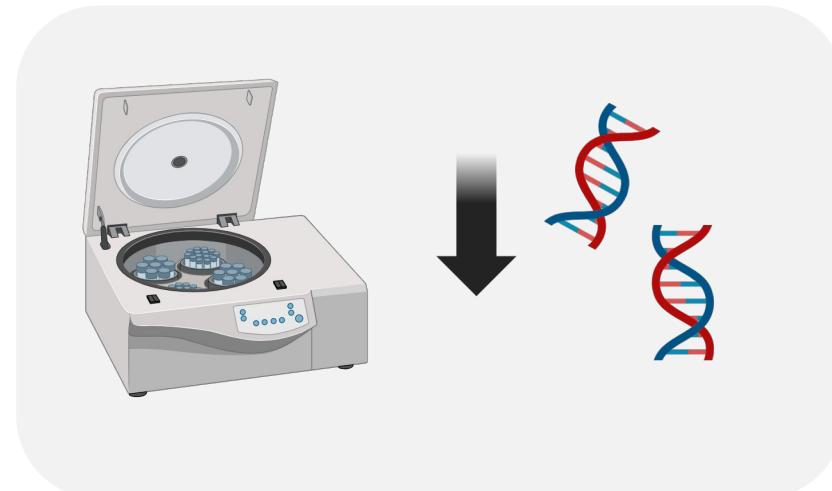
A

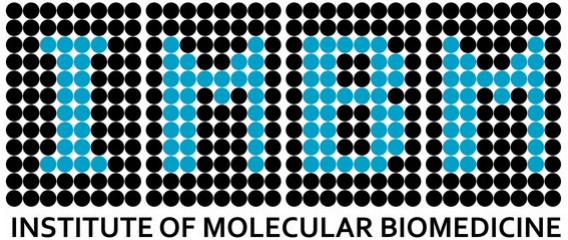


how is the fragment length affected?



Conclusion





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