

## Customer information – Bioink variance

### Dear valued customer,

This letter is to inform you of a temporary variance in the Bioinks specified below. In our quality control and due to incoming base material, we have observed higher levels of endotoxins than our inhouse requirements specify (50 EU/ml). Endotoxins can affect some cells in culture by inducing release of cytokines and other inflammatory markers, specifically cells activated during an immune response. Materials with content over 1 EU/ml are not suitable for use in in vivo studies. The affected bioinks are also not recommended to use with stem cells or immune cells. However, the observed levels remain suitable for most other applications including experiments with immortalized and non-stem primary cell lines.

### Affected Materials/Bioinks:

1. CELLINK Bioink
2. CELLINK Fibrin
3. CELLINK Skin
4. CELLINK Bone
5. CELLINK Lamininks
6. CELLINK RGD
7. GelMA C
8. Nanofibrillated Cellulose Thickener

Please contact CELLINK customer support for further information. We value our collaboration highly, have taken actions to reduce the risk for future variances and we are continuously striving to deliver the highest quality materials to our customers around the world.

**Signed on behalf of CELLINK**

A handwritten signature in dark blue ink, appearing to read "Christian Pitulia".

*Christian Pitulia*

Head of Product Management, Bioprinting

