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- **Biosafety:** low tumorigenicity, few human pathogenic viruses can be propagated, no infective retroviruses detected so far
- **Ease of gene transfer** + possibility of gene amplification
- **Manufacturing:** rapid growth, suspension growth (scale up)
- **High product quality:** post-translational modifications similar as in human

Name 4 pharmaceuticals made in CHO
cells

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- tPA: tissue plasminogen activator
- Monoclonal antibodies (Humira, Avastin, Herceptin)
- EPO: Erythropoietin
- Lantus (insulin)

Name 3 pharmaceuticals made in E.
coli

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- Human growth hormone
- Recombinant human insulin
- Interferons

Name 4 pharmaceuticals made in yeast (*Saccharomyces cerevisiae*)

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- Hepatitis B Vaccine (subunit vaccine)
- Insulin
- Platelet-derived growth factor
- Hirudin