RNA standards for avian influenza and *Newcastle disease virus* specific RT-qPCRs
RNA run-off transcripts for AIV/NDV

- Universal IC
- Eurasian control
- American control
- Newcastle controls

Plasmids, transcripts available, but no armored RNA
AIV

M – Spackman et al.
H5, H7-1,-2 US – Spackman et al. (old/new)

H5, H7 – Slomka et al.
NP, N1 – Hoffmann et al.
IC

IC2 – Hoffmann et al., 2007

NDV

Newly developed NP-specific PCR (Waeckerlin et al.)

M-specific PCR by Wise et al.
Considerations

Copy-based standards generally not required for diagnostic applications

- Naturally armored control available

Required for quantitative research applications

- Most groups have their own standard
- Switch of standards would require methodological adaptations and might challenge comparability

Reconsider usefulness and design of RNA standards
Acknowledgments

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