

(digital PCR) OR (dPCR)

NCT Number		Title	Authors	Description	Identifier	Dates
1	pubmed:36091480	Evaluation of factors contributing to variability of qualitative and quantitative proficiency testing for SARS-CoV-2 nucleic acid detection	Yongzhuo Zhang Xia Wang Chunyan Niu Di Wang Qingfei Shen Yunhua Gao Haiwei Zhou Yunjing Zhang Yan Zhang Lianhua Dong	The pandemic caused by SARS-CoV-2 has led to unprecedented social and economic disruption. Many Nucleic acid testing (NAT) laboratories in China have been established to control the epidemic better. This proficiency testing (PT) aims to evaluate the participants' performance in qualitative and quantitative SARS-CoV-2 NAT and to explore the factors that contribute to differences in detection capabilities. Two different concentrations of RNA samples (A, B) were used for quantitative PT....	pmid:36091480 pmc:PMC9450473 doi:10.1016/j.bsheal.2022.08.004	Mon, 12 Sep 2022 06:00:00 -0400
2	pubmed:36091641	Micro-injection Molded Droplet Generation System for Digital PCR Application	Daae Jo So Young Kim Hyeon Woo Kang Sung Han Pyo Nam Kyu Jeong Nam Ho Bae Seok Jae Lee Yong Tae Kim Kyoung G Lee	Sensitive, effective, and quantitative analysis of infectious pathogens is an important task for the prevention of human health threats. Herein, we present an advanced approach to producing gene-encapsulated microdroplets for quantitative analysis using a micropatterned metal mold and injection molding technique with an automatically operated system. An injection molded microdroplet generation device was successfully fabricated with a minimum channel width of 30 m and optimized to produce 100...	pmid:36091641 pmc:PMC9446600 doi:10.1007/s13206-022-00079-8	Mon, 12 Sep 2022 06:00:00 -0400
3	pubmed:36093578	Development and Analytical Validation of a 6-Plex Reverse Transcription Droplet Digital PCR Assay for the Absolute Quantification of Prostate Cancer Biomarkers in Circulating Tumor Cells of Patients with Metastatic Castration-Resistant Prostate Cancer	Martha Zavridou Stavroula Smilkou Victoria Tserpeli Aggeliki Sfika Evangelos Bournakis Areti Strati Evi Lianidou	CONCLUSIONS: Our 6-plex RT-ddPCR assay was highly sensitive, specific, and reproducible, and enabled simultaneous and absolute quantification of 5 gene transcripts in minute amounts of CTC-derived cDNA. Application of this assay in clinical samples gave diagnostic sensitivity and specificity comparable to, or better than, RT-qPCR.	pmid:36093578 doi:10.1093/clinchem/hvac125	Mon, 12 Sep 2022 06:00:00 -0400
4	pubmed:36093718	Development and characterization of reference materials for EGFR, KRAS, NRAS, BRAF, PIK3CA, ALK, and MET genetic testing	Wenxin Zhang Shoufang Qu Qiong Chen Xuexi Yang Jing Yu Shuang Zeng Yuxing Chu Hao Zou Zhihong Zhang Xiaowen Wang Ruilin Jing Yingsong Wu Zhipeng Liu Ren Xu Chunyan Wu Chuanfeng Huang Jie Huang	CONCLUSION: These RMs may be an attractive tool for the development, validation, and quality monitoring of molecular genetic testing.	pmid:36093718 doi:10.3233/THC-220102	Mon, 12 Sep 2022 06:00:00 -0400