



Research

Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR



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Abstract



Full-Text



Figures & Tables



References (22)



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Background

The ongoing outbreak of the recently emerged novel coronavirus (2019-nCoV) poses a challenge for public health laboratories as virus isolates are unavailable while there is growing evidence that the outbreak is more widespread than initially thought, and international spread through travellers does already occur.

Aim

We aimed to develop and deploy robust diagnostic methodology for use in public health laboratory settings without having virus material available.

Methods

Here we present a validated diagnostic workflow for 2019-nCoV, its design relying on close genetic relatedness of 2019-nCoV with SARS coronavirus, making use of synthetic nucleic acid technology.

Results

The workflow reliably detects 2019-nCoV, and further discriminates 2019-nCoV from SARS-CoV. Through coordination between academic and public laboratories, we confirmed assay exclusivity based on 297 original clinical specimens containing a full spectrum of human respiratory viruses. Control material is made available through European Virus Archive – Global (EVAg), a European Union infrastructure project.

Conclusion

The present study demonstrates the enormous response capacity achieved through coordination of academic and public laboratories in national and European research networks.



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On the occasion of European Immunisation Week, *Eurosurveillance* published an editorial that outlines the lessons learnt since the outset of the COVID-19 pandemic, with regards to rapid vaccine development, authorisation, procurement, distribution and administration in large vaccination campaigns. Read the full editorial [here](#).

News/announcements

ESCAIDE 2021 call for abstracts is open from 19 April to 19 May. The conference welcomes abstracts in all areas related to infectious disease prevention and control, including epidemiology, public health microbiology, surveillance, and the application of tools and methods to support infectious disease outbreaks or interventions. There will also be a late breaker call in September for issues arising after the close of the main abstract call. More information and guidelines can be found [here](#).

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