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Towards the veterinary diagnostics of the future

Main topic:

The ambiguity of zoonotic hepatitis E virus: asymptomatic pigs but sick patients

## PAVIO N. 1

<sup>1</sup> UMR Virologie, Anses, Inrae, Enva, Maisons-Alfort, France

Hepatitis E virus (HEV) infection causes acute hepatitis in humans, which is usually self-limited but can lead to major liver failure or progress toward chronic infection. While in tropical and subtropical areas HEV infections are associated with major waterborne epidemics, in industrialized countries HEV cases are autochthonous and of zoonotic origin. The main animal reservoirs of zoonotic strains of HEV are domestic and wild suidae and the main route of transmission to humans is foodborne through consumption of undercooked infected meat.

The Hepeviridae family, to which HEV belongs, includes also viruses present by other animal species such as rats (Rocahepevirus), bats (Chirohepevirus) and avians (Avihepevirus).

Recently, several human cases of hepatitis E, including two severe cases, have been associated with Rocahepevirus, suggesting that species barrier crossings may occur. Infection with hepatitis E viruses, although asymptomatic in animals, can lead to severe disease in humans, and reservoir animal species represent niches with high potential for the emergence of more virulent strains.