

First detection of Piscine reovirus in France



May 2015 in France

- A batch of 220 000 *Salmo trutta* (female), 7g., T° 13°C, origine France
- Mortality >1/1000 per day
- Looked like furunculosis -> Enrofloxacin treatment : no effect
- No bacteria
- Numerous hemorrhages on fat tissue



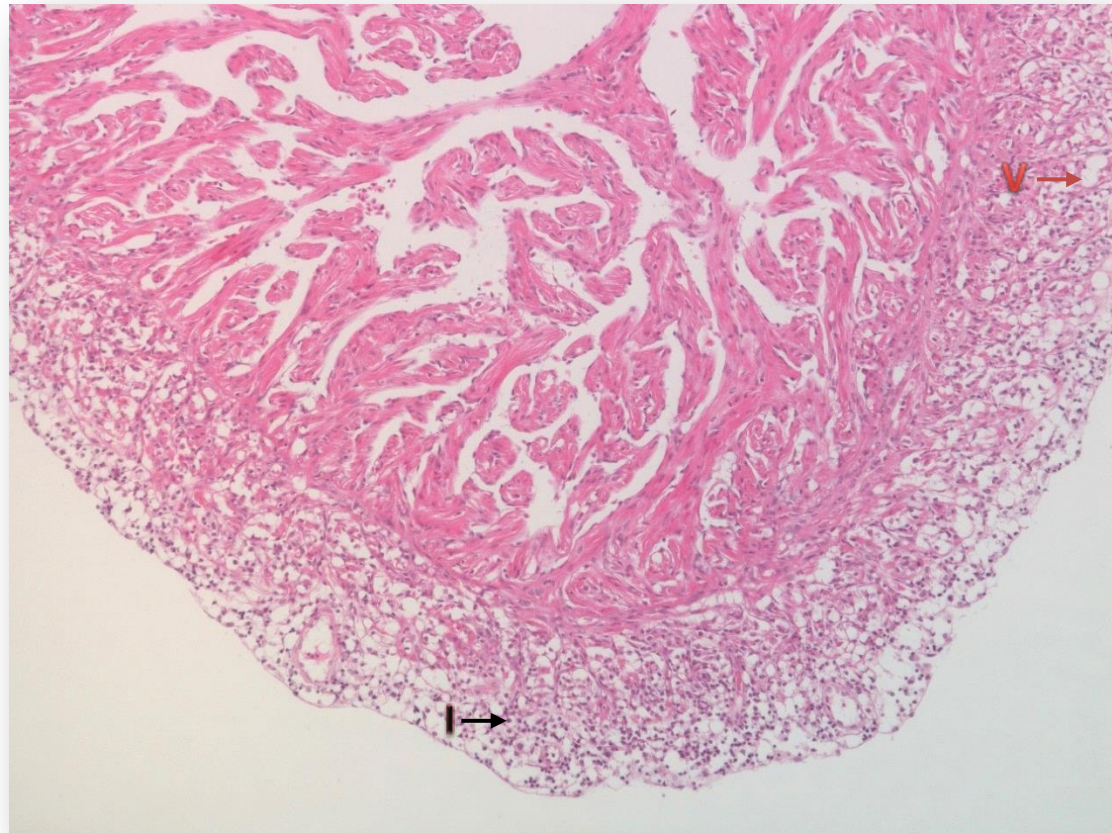
- Few days later, flavobacterium crisis, treatment with florfenicol
- Strong increase of mortality

Histology

Heart: light to moderate lesions, →
 . Pericardite
 . Infiltration
 . Vacuolisation




Liver: lesions with vacuolisation

Pancreas: necrotic areas (1 animal/4)
 no lesions (3 animals)



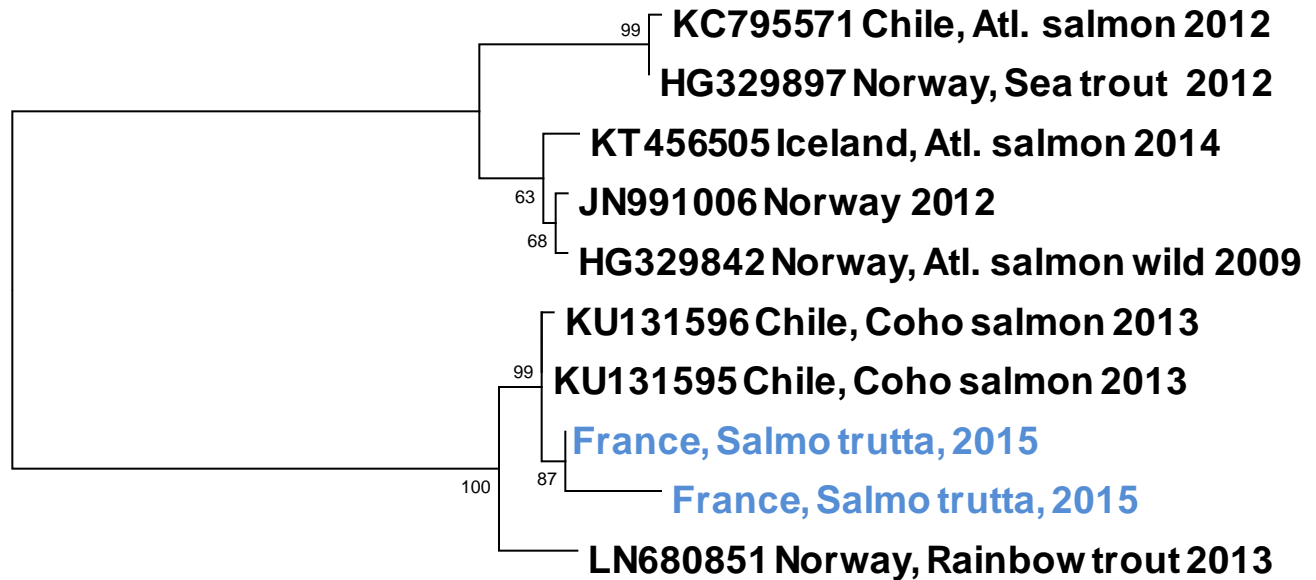
« lesions compatible with a pathogenic virus »

Suspicion of virus

- IPNV positive: cell culture + PCR
- PRV positive
 - qPCR (Olsen 2015) : Ct 29
 - cPCR positive: 3 ORF amplified and sequenced:
 - $\sigma 3/s1$ (outer capsid protein)  1053 bp
 - L1 (RNA polymerase)  3901 bp
 - M2 (outer capsid protein)  2174 bp

Genetic identification of PRV-fr

ML phylogeny with segment 1 (501 nt)



Conclusions

- First detection of PRVom in France associated with mortalities on *Salmo trutta*

PRV / Brown trout [Norway 0-11% (Garseth et al. 2013)
Norway 1,3 % (Madhun et al. 2016)
Chile (Godoy et al.)

- PRV similar to isolates from Norway and Chile (genotype II)

PRVII [Norway (rainbow trout)
Chile (Coho salmon)

- Origin unknown

Conclusions

Role of PRV in the pathology ?

- Unusual pathology (haemorrhages on fat tissue)
HSMI ?
- Pericarditis and pancreatitis
- Coinfection of IPNV + PRV

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