equipment Spectra Physics, USA. Infectious virus titer of irradiated sample and non-irradiated control were determined on MDBK and CT cells monolayers.

Results: The two phthalocyanines (ZnPcMe and ZnPcS) showed a marked virucidal effect against HSV-1 at irradiation for 5 and 20 min (Δlogs = 3.0 and 4.0). This effect was weaker against VV (Δlogs = 2.34 and 2.17). BVDV had a low sensitivity to ZnPcMe (Δlog = 2.0) and a high sensitivity towards irradiation with ZnPcS for 5 and 20 min (Δlogs = 5.8 and 5.3). Both complexes were unable to inactivate NDV.

Conclusion: Inactivation of enveloped viruses by the studied phthalocyanines depends on the structure and the composition of the virus envelope.

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Classical Swine Fever Outbreak Containment – Antivirals as an Epidemiologically and Economically Viable Alternative to Emergency Vaccination and Culling

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Classical swine fever (CSF), a pig disease caused by a pestivirus, might result in huge economic losses to countries with densely populated pig areas (DPLAs). The EU minimum control measures require depopulation of infected farms, movement restrictions, zoning and surveillance (base strategy). Emergency vaccination is authorised for DPLAs although the base strategy plus culling in a 1 km ring around infected premises is preferred. The Dutch contingency plan reads vaccination of pigs in a 2 km ring as it was as effective as 1 km ring culling using a stochastic model. Drawbacks to vaccination are inherent as differentiation of vaccinated from infected pigs is impossible for live vaccines and E2 marker vaccines suffer from a 10–14 day 'immunity gap' (time between vaccination and protection). Alternatives using small molecules targeting CSFV replication are being explored. Efficacy was shown in proof-of-principle studies with BPIP, an imidazo[4,5-c]pyridine. Oral administration to pigs 1 day prior to CSFV infection and continued for 15 days decreased viremia compared to untreated pigs and CSFV transmission from BPIP-treated pigs to sentinels was reduced. Hence, this study was set up to simulate between-herd CSFV spread with BPIP supplemented to feed in a 1 km ring around infected farms. The effects were compared to 3 other control scenarios: (i) base strategy, (ii) base strategy with 1 km culling and (iii) base strategy with 2 km E2 marker vaccination. The InterSpread Plus model was adapted to simulate subsequent CSFV spread after incursion in a Belgian DPLA. The median number of infected, culled and supplemented farms (respectively 5, 5 and 29) was lowest for the antiviral strategy followed by the vaccination policy. Moreover, antiviral supplementation was calculated to result in the shortest median outbreak duration. The antiviral scenario is as viable as marker vaccination when both direct (culling and disinfection) and indirect (transport bans, reproduction prohibition, etc.) costs are considered; the other scenarios being more expensive. In conclusion, CSF outbreak containment with antivirals is a valid alternative to more 'conventional' measures.

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Identification and Characterization of OBR-5-340 – A Novel Broad-spectrum Anti-human Rhinovirus (HRV) Inhibitor

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HRVs are the major cause of the common cold, a mild and self-limiting upper respiratory tract infection that causes millions of absences from school and work as well as medical consultations annually. In addition, rhinoviral infections can lead to serious complications, e.g. sinusitis, otitis media, bronchitis, pneumonia as well as exacerbating asthma, COPD, and cystic fibrosis. Until now, there is no approved effective antiviral drug for treatment of HRV infections. Here we describe the discovery of OBR-5-340, a novel broad-spectrum anti-rhinoviral compound. It belongs to a series of 100 new pyrozolo-pyrimidine derivatives that were synthesized and tested for cytotoxicity and CPE inhibitory activity against 30 HRV serotypes in HeLa cells. Like most of these derivatives, OBR-5-340 is composed of 3 ring systems, referred to as ring A [aniline], B [pyrazolo[3,4-*d*]pyrimidine], and C [phenyl] and well tolerated. OBR-5-340 inhibits the CPE of all studied HRV serotypes in the nano- and micromolar dose range. An advantage is its strong activity against pleconaril-resistant HRV serotypes, e.g. HRV 5, 42, and 48. Using HRV 5 as example, the antiviral activity of OBR-5-340 was further confirmed by plaque reduction assays as well as virus-yield reduction assays under single-step growth cycle conditions in HeLa cells. Results from mode of action studies demonstrate the inhibition of virus adsorption by OBR-5-340. In conclusion, OBR-5-340 represents a novel potent capsid-binding compound with broad-spectrum anti-rhinoviral activity that warrants further preclinical and clinical development.

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Relationship Between Homocysteine Serum Level and Other Blood Analyses Parameters in HIV-infected Patients

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Background: To assess the possible association of increased homocysteine serum level with multiple blood analyses parameters in HIV-infected patients.

Methods: This is the second part of a cross-sectional study, carried out as a supplementary task to the usual control required by HIV-infected patients, in the outpatients' clinic of the Hospital General of Castellon, Spain, along two consecutive visits. The possible association of homocysteine serum level with multiple blood analyses parameters and with variables found to be associated with the aminoacid in the first part of the study was assessed with a multiple linear regression analysis.

Results: A total of 145 patients were included. Creatinine was higher than normal in 7 patients (5%), prothrombin time was higher than normal in 36 patients (25%), and a monoclonal gammopathy was detected in 2 patients (1%). An association was found between high homocysteine serum level and the following variables: high creatinine ($P > 0.001$), low folic acid ($P > 0.001$), HIV risk behavior sexual (vs. parenteral) ($P = 0.033$), hepatitis C virus