MANIFESTATIONS OF INFLUENZA IN ROMANIA

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mariPOC by ArcDia

AGENDA:

1. **Supervising the influenza infection - a priority for the medical authorities in our country;**
2. **Official data reported at the level of the Ministry of Health;**
3. **The situation of the influenza cases at the level of INBI *Matei Balş*;**
4. **Cases of influenza in children: 0 - 14 years;**
5. **The diagnosis of influenza infections: Mari-POC rapid tests, the results of these tests; a comparative analysis between 2013 – 2014;**
6. **Neurological complications of influenza: Guillain – Barre Syndrome, encephalitis;**
7. **Conclusions.**

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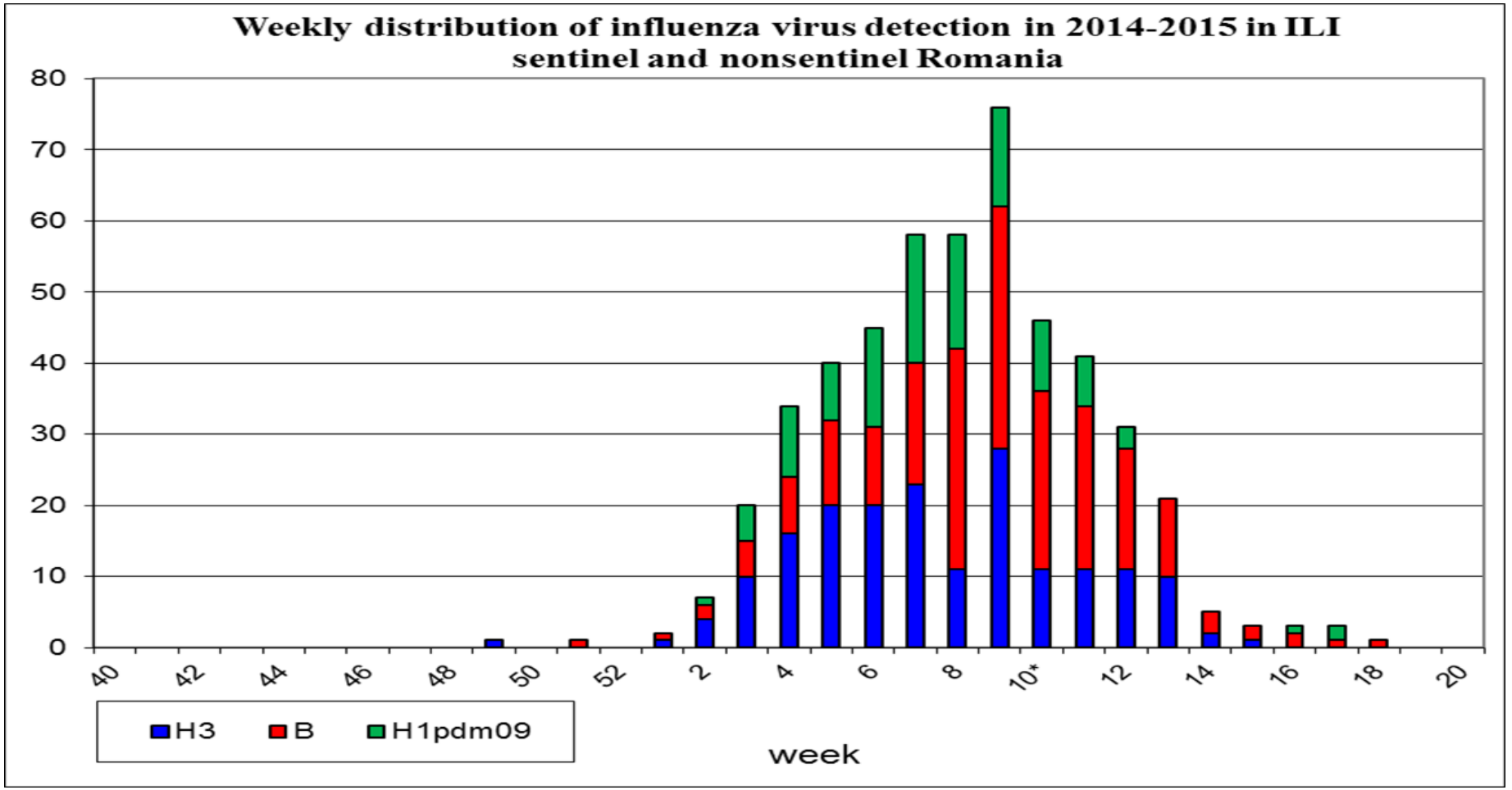
SUPERVISING INFLUENZA INFECTION constitutes a priority for health authorities in Romania.

Influenza surveillance system in Romania

- In Romania, the National Centre for Surveillance and Control of Communicable Diseases (NCSCCD) within National Institute of Public Health (NIPH), Bucharest coordinate the influenza surveillance system.
- Data is collected by sentinel physicians and NIPH compiles and analyze information on influenza activity at national level and produces the weekly report during the influenza season.

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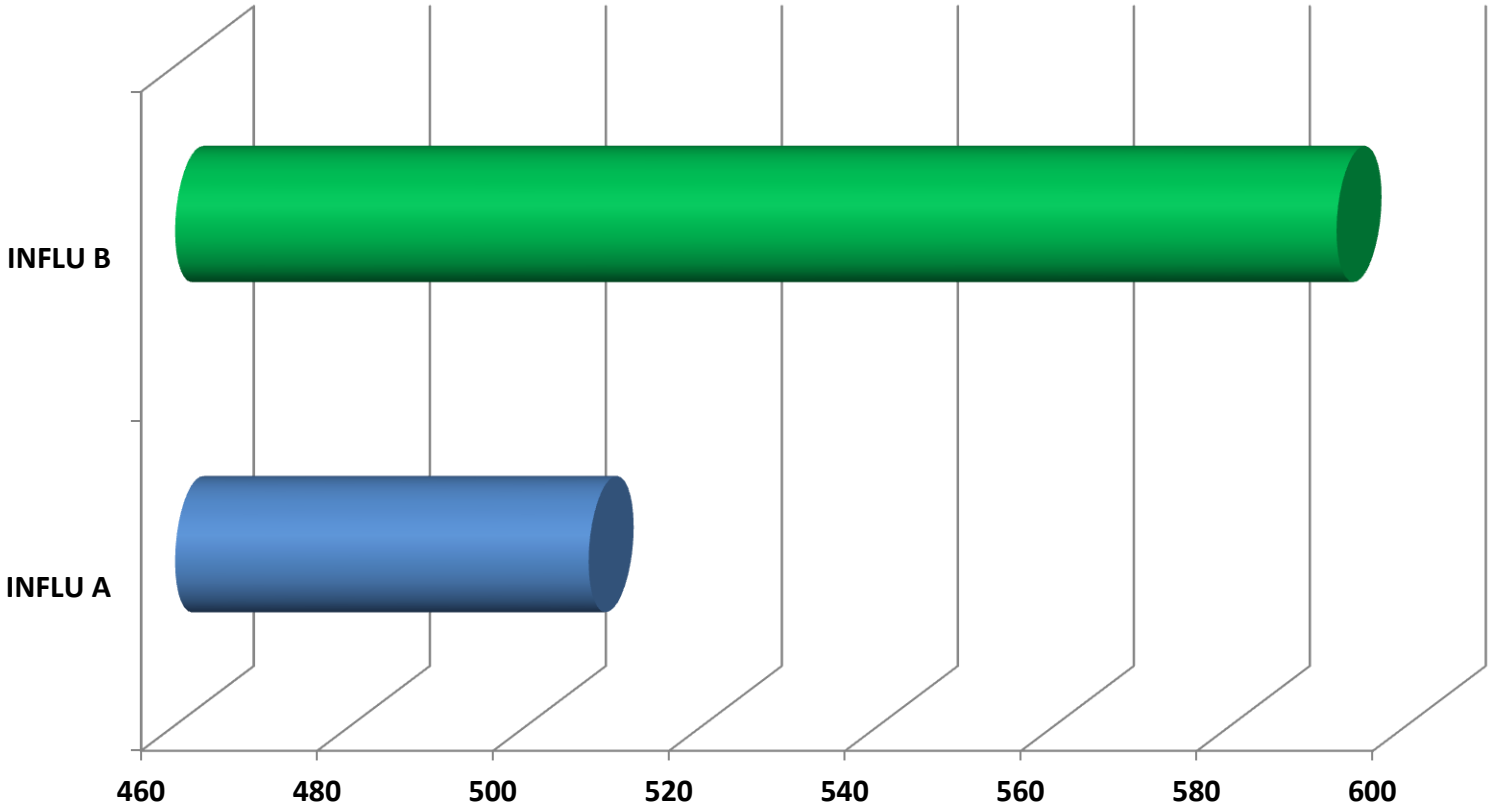
Influenza activity during 2014-2015 season



Influenza activity was higher during all the 2014-2015 season, compared to the last two seasons and the season was characterized by co-circulation of influenza A(H3N2), A(H1N1)pdm09 and B viruses.

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National surveillance of influenza virus infection during the season 2014-2015

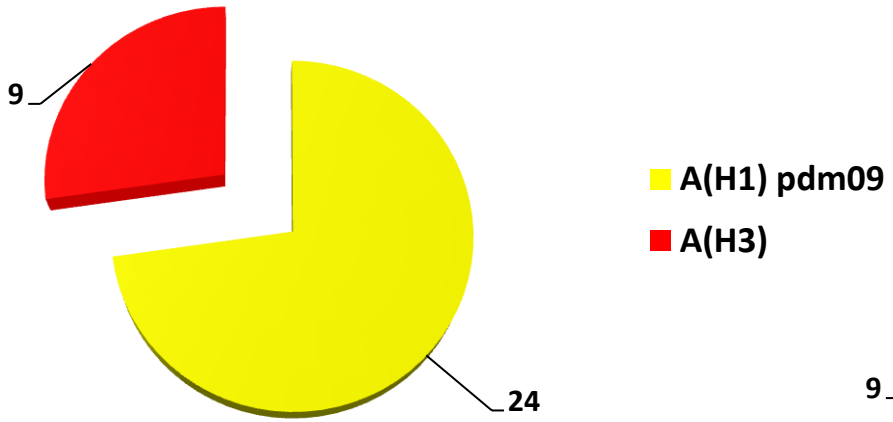


Number of Influenza infections confirmed by Institute Cantacuzino: 1103. 507 cases of influenza A (283 - subtype H3, 180 - subtype H1 pdm09, 44 unclassified), 592 cases of influenza B, 3 coinfections AH3 + B, 1 coinfection AH1 + B.

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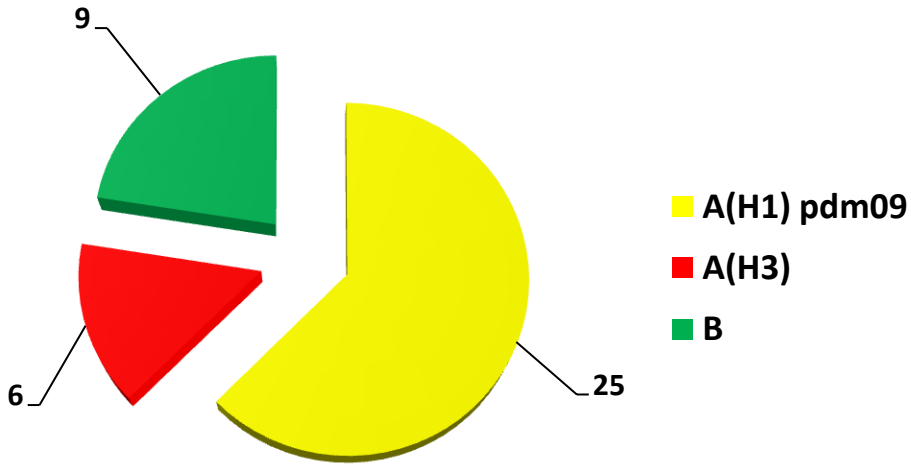
National surveillance of deaths related to influenza virus infection

The season 2013-2014



There were recorded 33 deaths.

The season 2014-2015

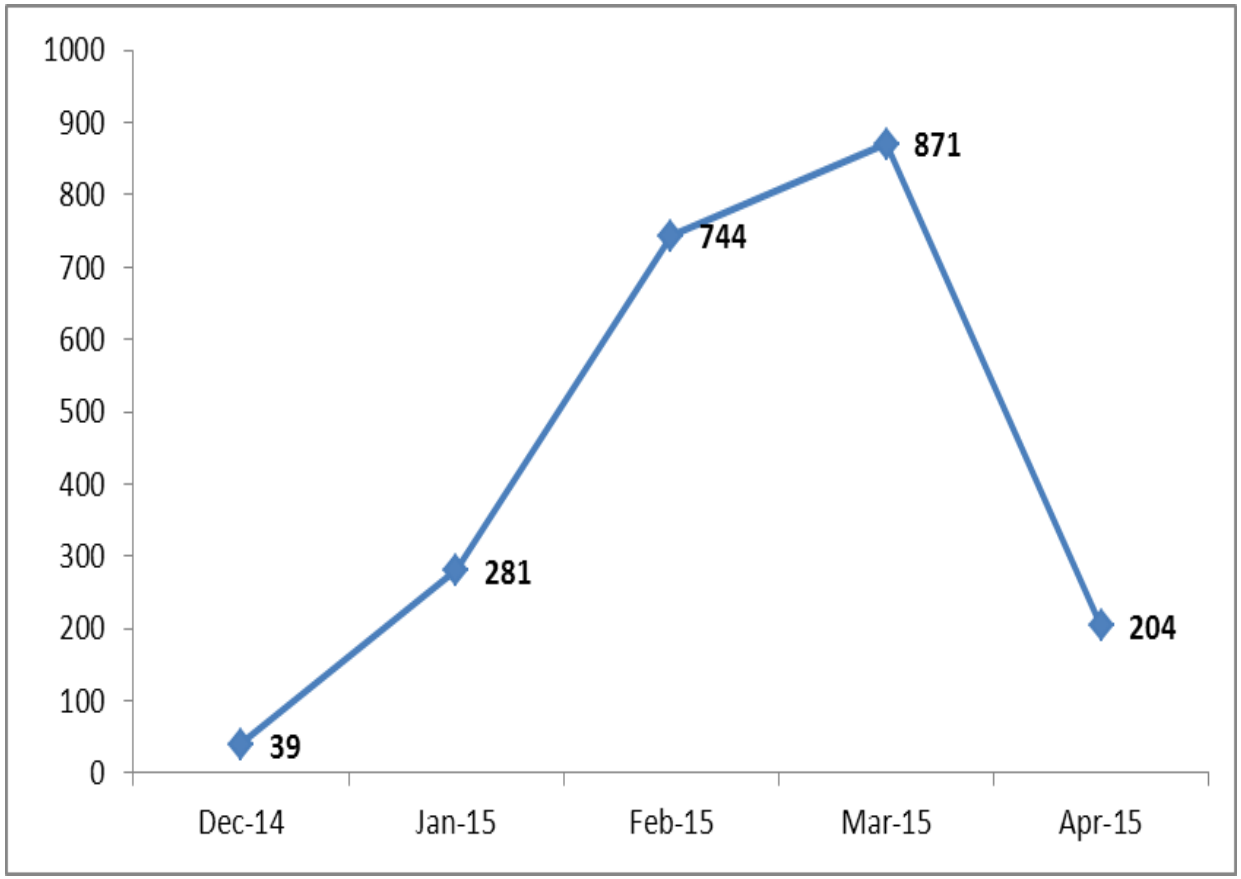


There were recorded 40 deaths.

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The situation of influenza cases recorded between December 2014 and April 2015 in INBI

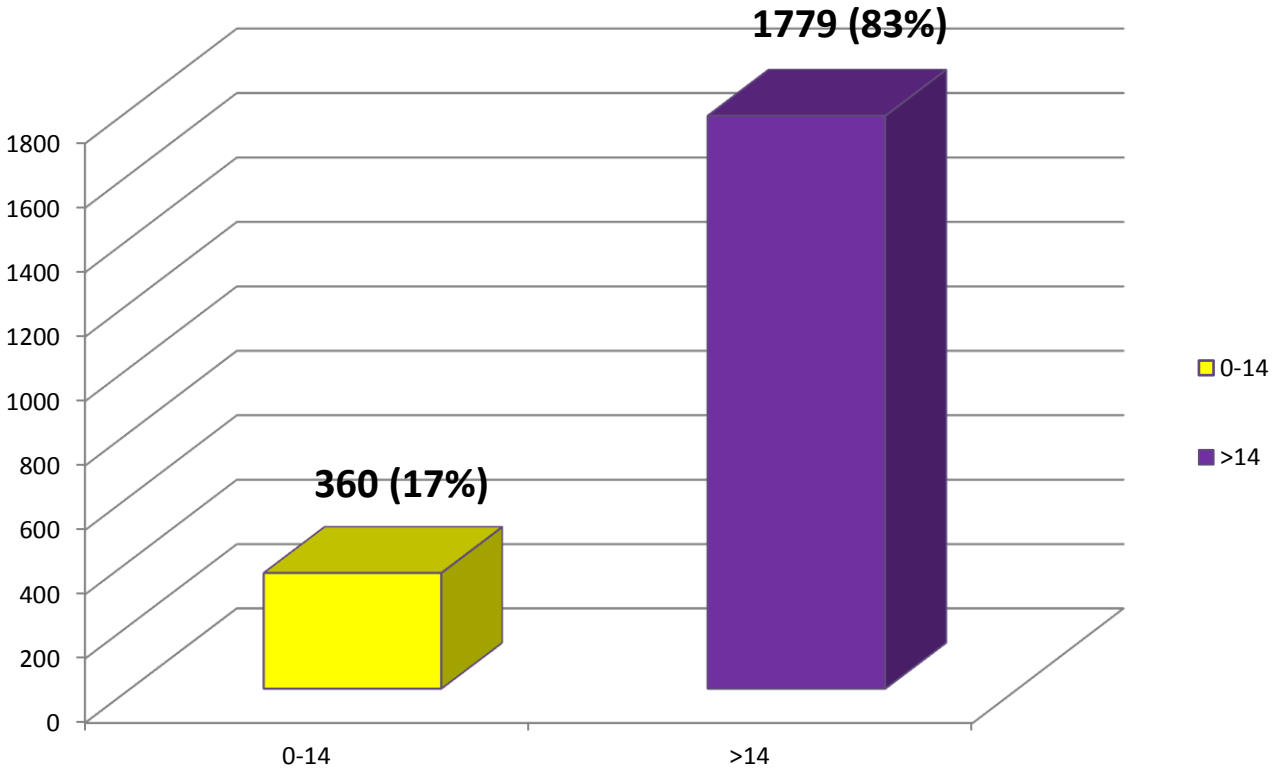
Dec. 14	Ian.15	Feb.15	Mar.15	Apr.15	Total
39	281	744	871	204	2139



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The number of cases according to age groups

Age groups	Number of cases	%
0-14	360	17%
>14	1779	83%
Total	2139	



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*The Diagnosis of respiratory infections by using mari POC rapid **tests:***

- mariPOC - multianalyte **point-of-care** testing of respiratory tract infections
- fully automated **immunoassay** test system
- detects Ag of **influenza A and B**, **RSV** , **hMPV**, **Adenovirus Parainfluenza 1,2,3** and optionally **Streptococcus pneumoniae** Ag
- uses fluorophore labeled antibodies
- the detection of the fluorescence signal is carried out by a laser with optical separation of unbound and bound tracer fractions
- **preliminary results in 20 min, final results in 2 h**

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mariPOC







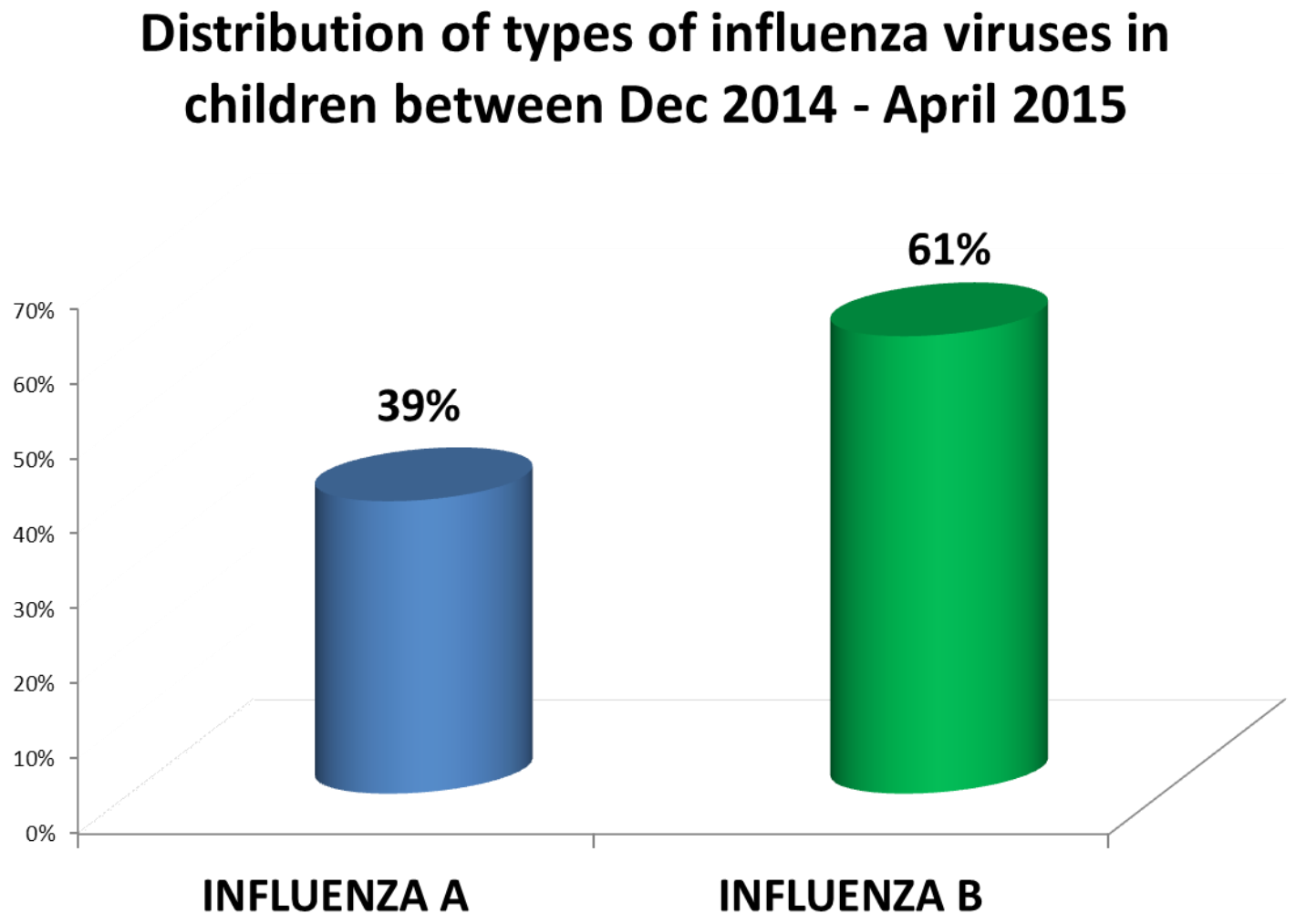
Final results

respi

Analyte	Result	Control
Influenza A virus	+	OK
Adenovirus	-	OK
Influenza B virus	-	OK
Metapneumovirus	-	OK
Parainfluenza virus 1	-	OK
Parainfluenza virus 2	-	OK
Parainfluenza virus 3	-	OK
RS virus	-	OK
S. pneumoniae	-	OK

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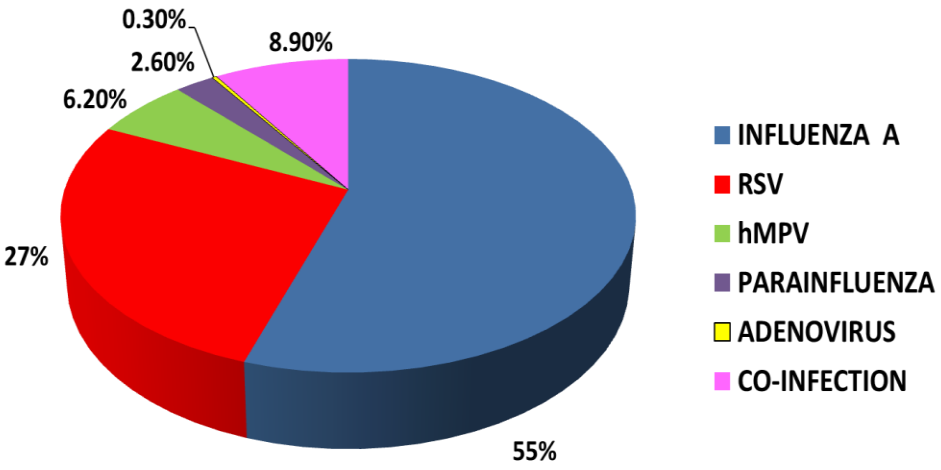
The results of mariPOC tests in INBIMB



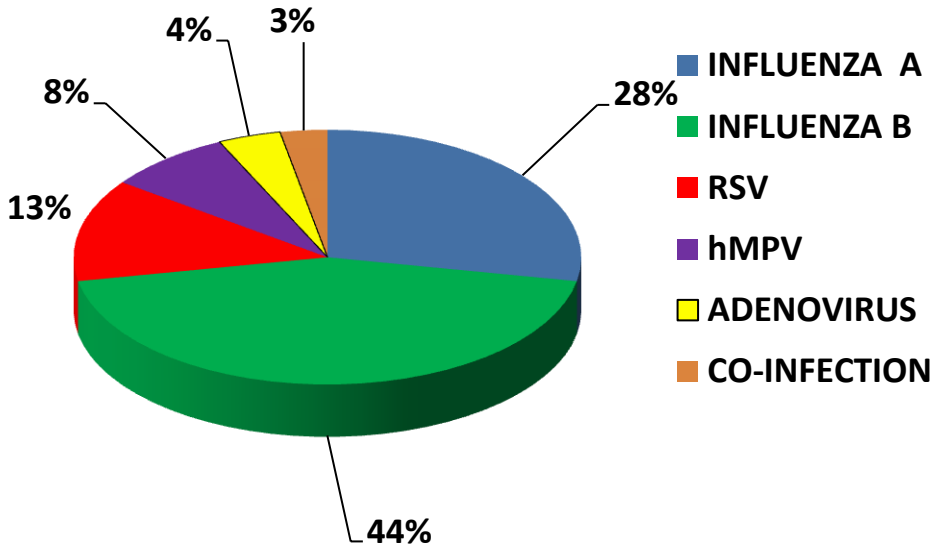
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The results of mariPOC tests in the previous 2 seasons

ETIOLOGY OF RESPIRATORY VIRAL INFECTIONS IN CHILDREN TESTED BETWEEN NOV 2013 - MAY 2014

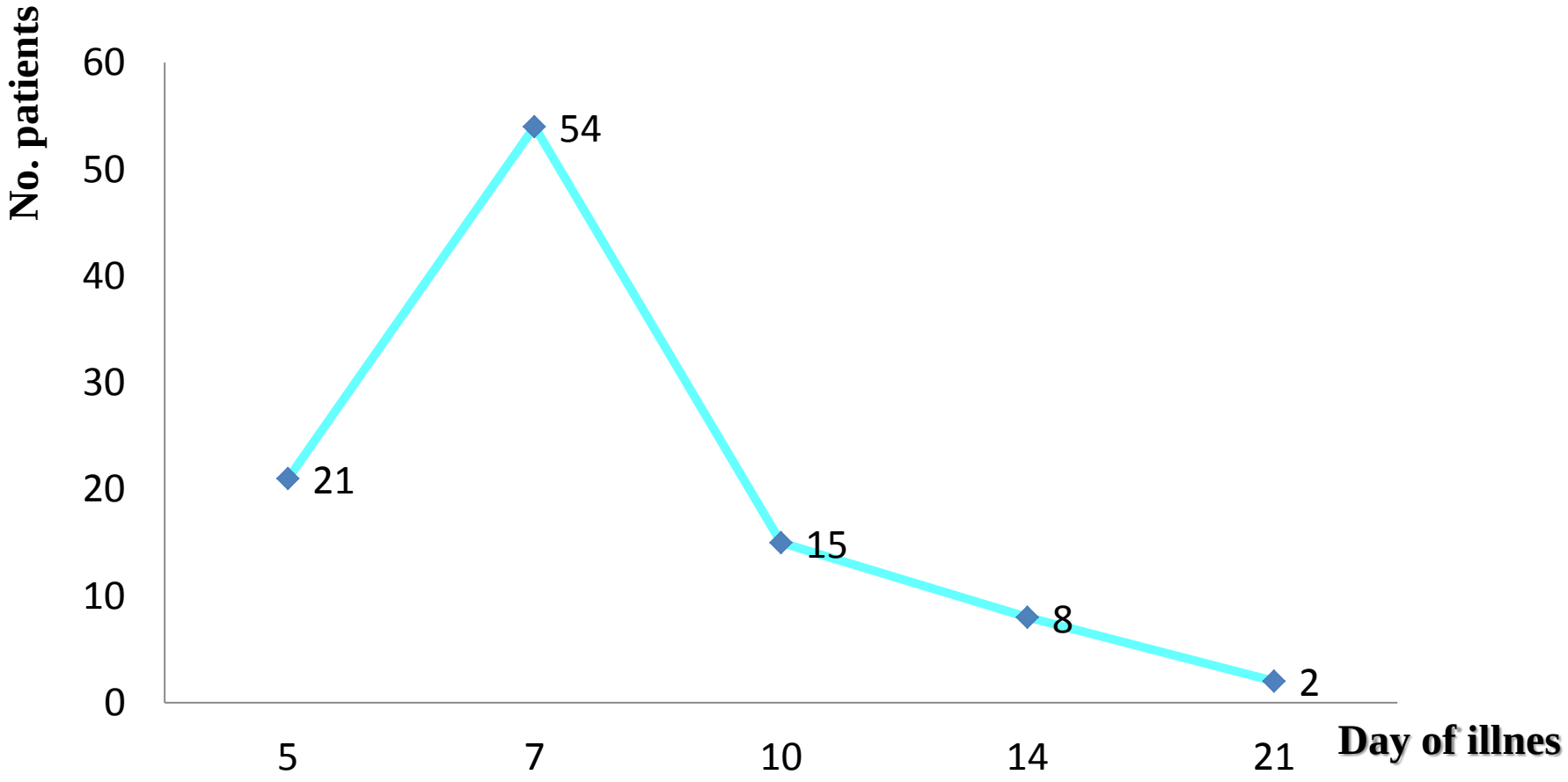


ETIOLOGY OF RESPIRATORY VIRAL INFECTIONS IN CHILDREN TESTED BETWEEN JAN 2015 - APRIL 2015

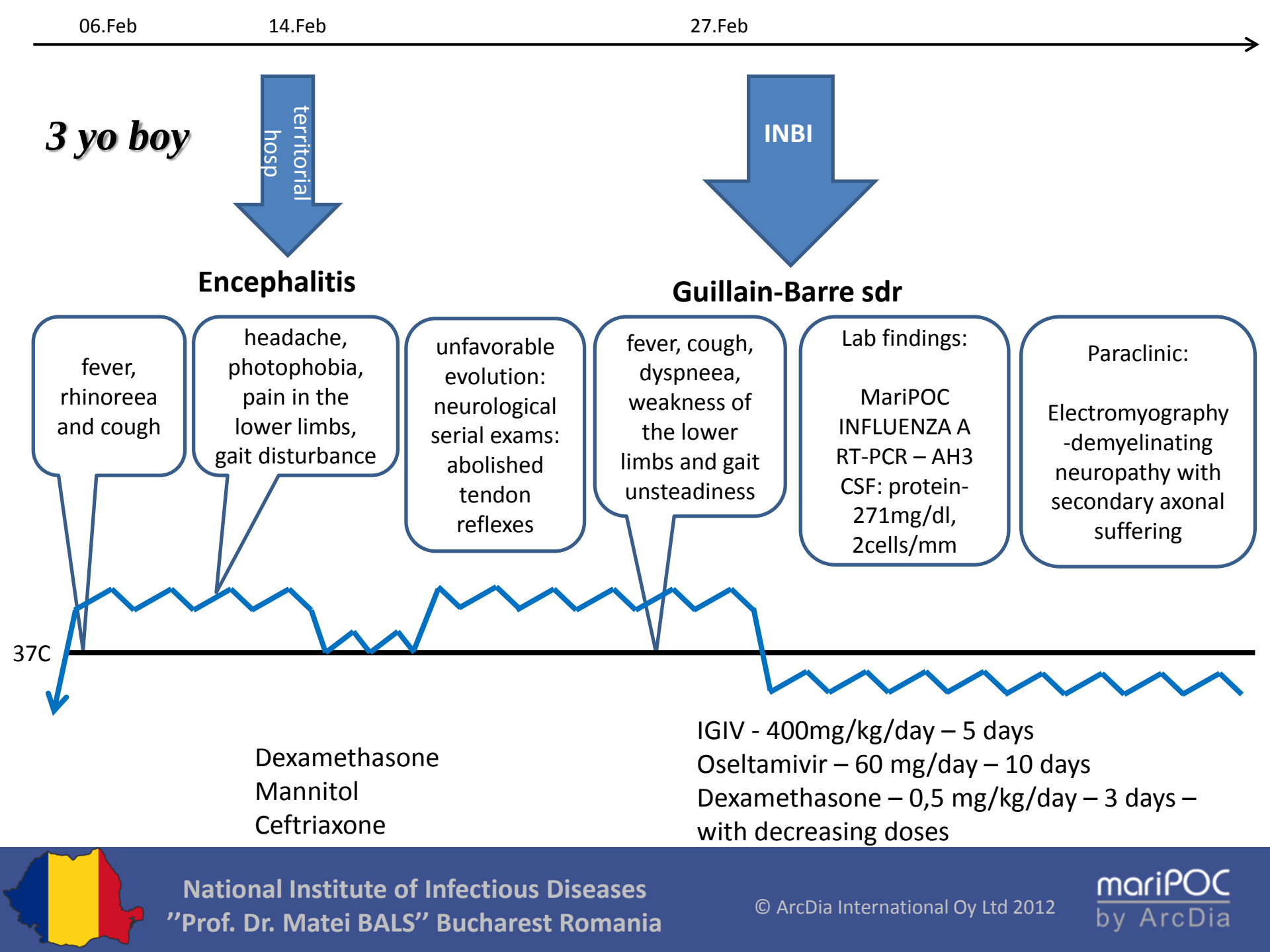


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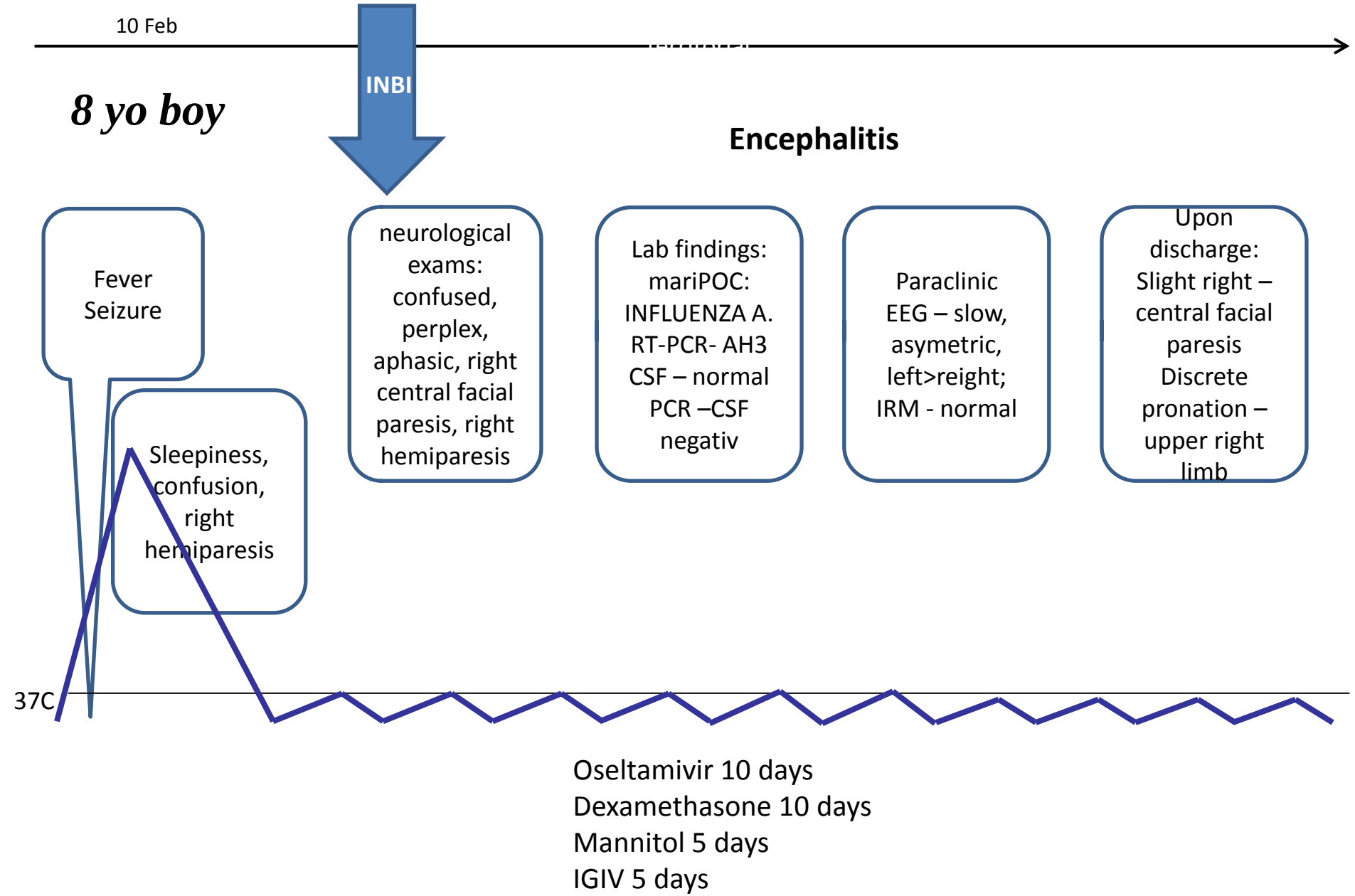
Dynamics of PCR negativity by day of illness



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CONCLUSIONS

- **mariPOC represents an important tool in the diagnosis of respiratory infections;**
- **neurologic impairment is one of the main complications of influenza infections;**
- **Due to the prolonged persistence of the virus in the airways, we recommend to extend the antiviral treatment for up to 10 days.**



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