

MICROBES AND MORE

CIRCULAR DISCUSSIONS IN HIV AND OTHER INFECTIONS

Prevalence, phenotypes and predictive factors of PASC in the Eucare cohort followed-up in telemedicine

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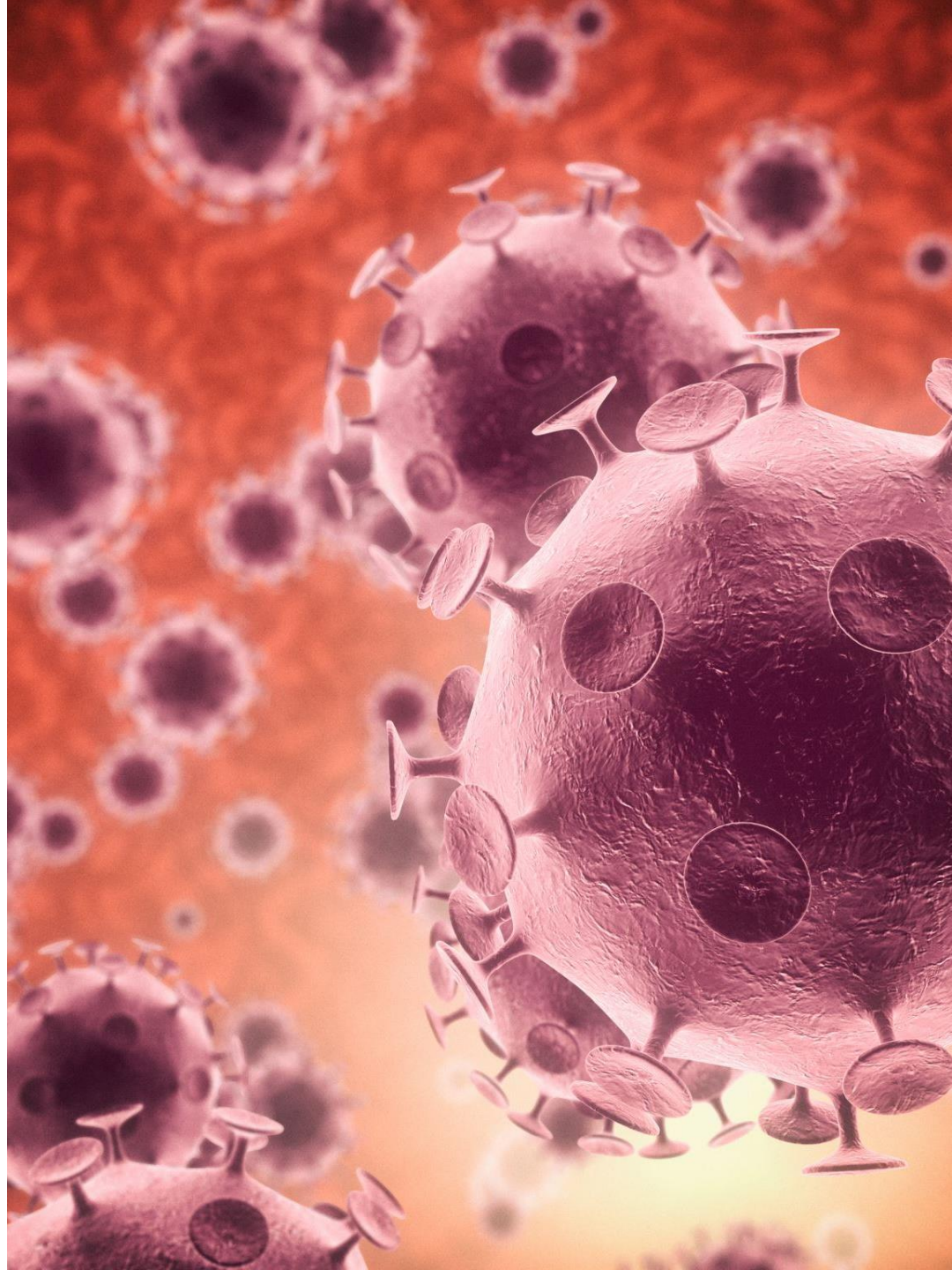
Legnano, June 9-10, 2023

Hotel del Parco



Background

- «Continuation or development of new symptoms 3 months after the initial SARS-CoV-2 infection, with these symptoms lasting for at least 2 months with no other explanation».
- Identification of clusters.
- 10-20% of pts. recovering from COVID-19; Medium time-to-recovery of 6 months, up to 12 months;
- Suspected relation with gender;
- Possible telehealth approach for follow-up: aim to ease the process of collection of clinical information.





Aim

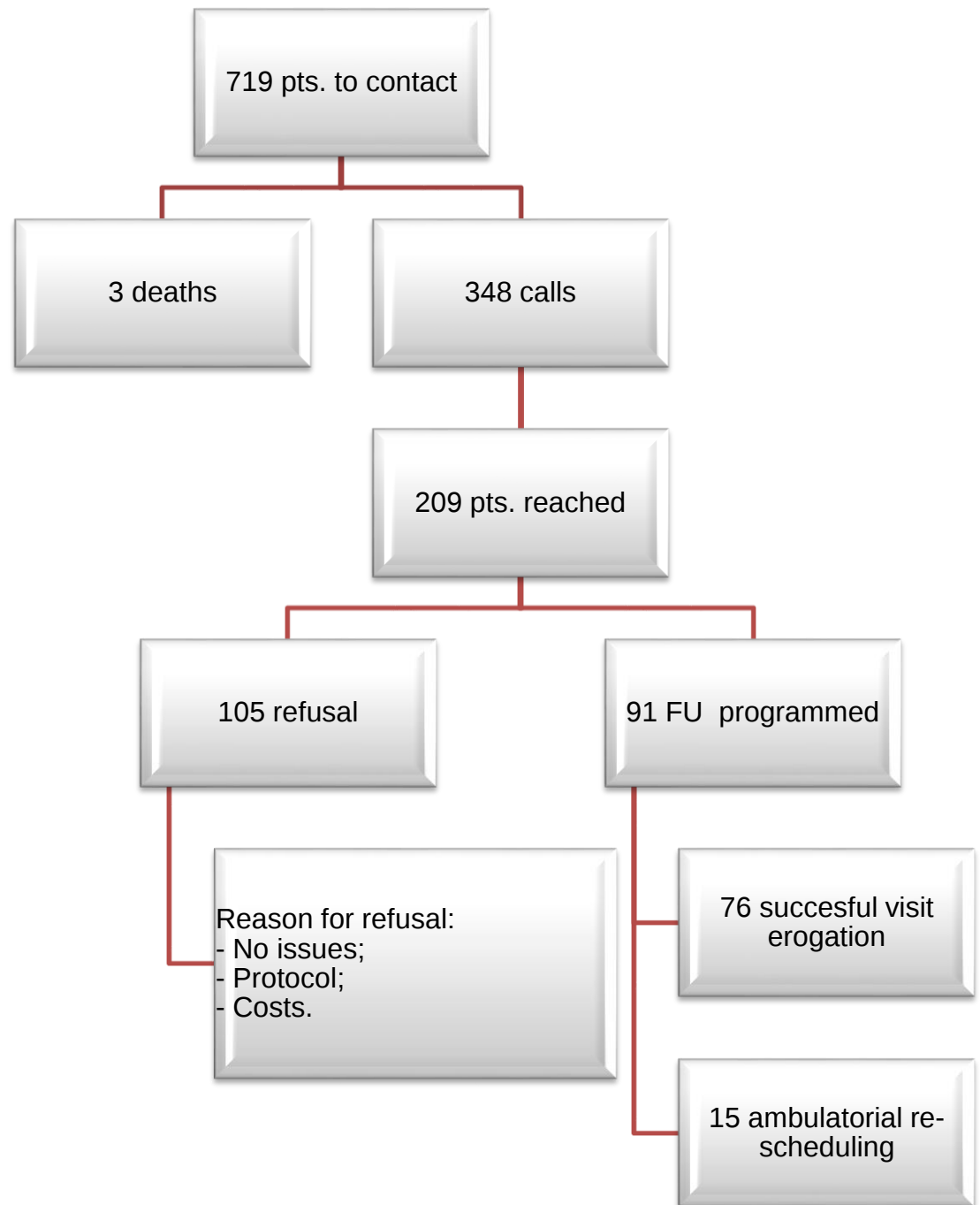
- Study of the prevalence of Post-acute sequelae of COVID-19 in a cohort of patients with active follow-up in our center;
- Identification of phenotypes that could better standardize the prevalence analysis of PASC;
- Detection of predictor that could identify populations with higher risk of developing PASC.

Methods

- Perspective study on patients hospitalized for acute SARS-CoV-2 infection during 2020, who underwent at least one visit at the post COVID-19 clinic and have an incomplete follow-up (3 visits at T1, T2 and T3);
- Telehealth follow-up proposed by phone call;
- Booking, programming and erogation of the visit 24+ month after the T1 Follow-up;
- Collection of the clinical information about Post-Acute Sequelae of COVID-19: use of an adapted version of WHO PASC evaluation questionnaires;
- HADS A/D, screening tool for PTDS (PCL-5) for identification of psychological issues.



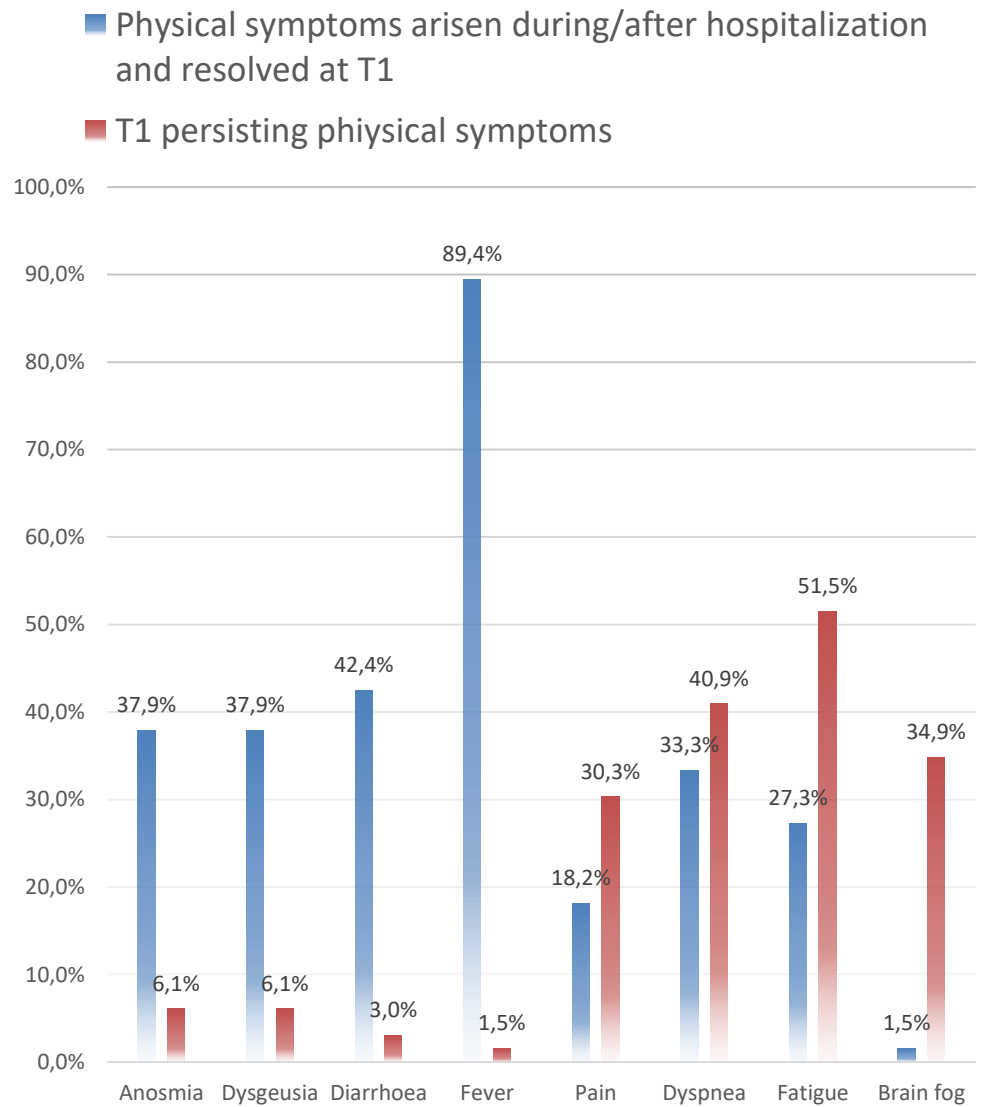
The road so far



Acute phase clinical features

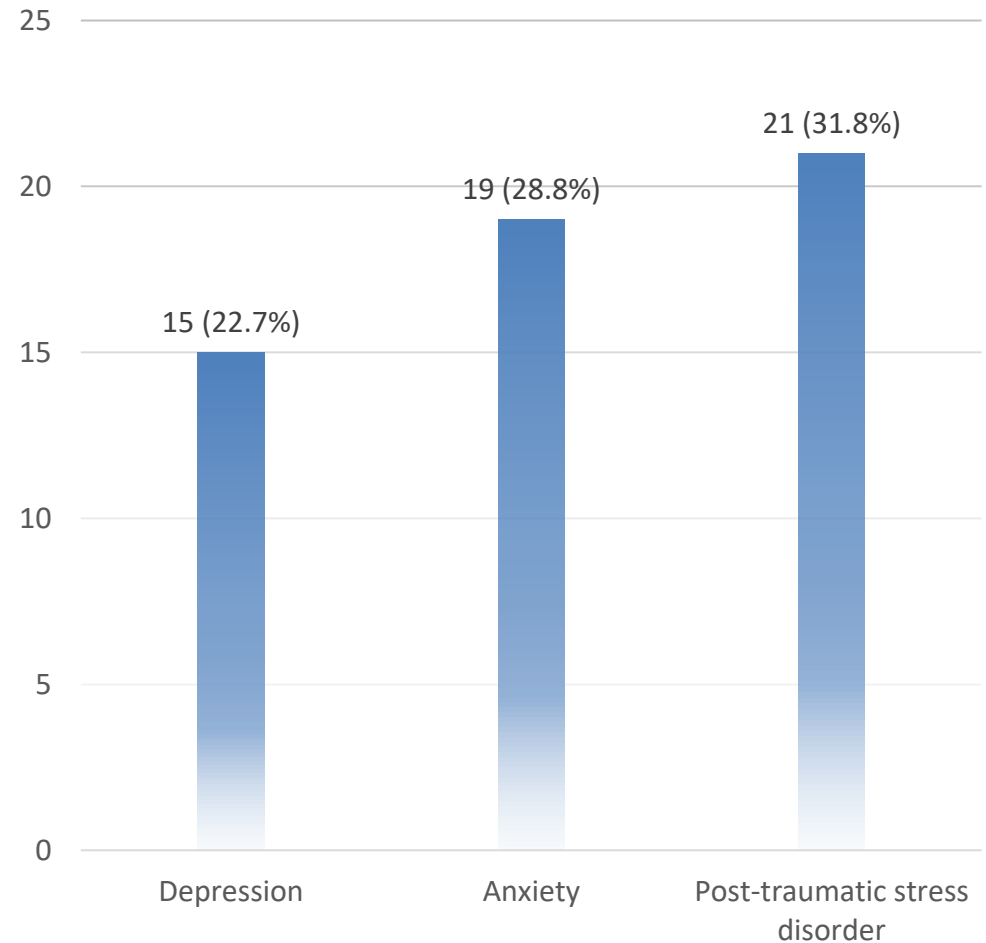
ACUTE PHASE FEATURES		N/MEDIAN	%/IQR
Age at admission		57	52-62
Reason of admission			
	COVID-19	54	81.80%
	Other reason not COVID-19-related	2	3%
	Unknown	10	15.20%
Year of admission (2020)		66	100.0%
Smoking status			
	Not smoker	34	51.5%
	Smoker	27	40.9%
	Previous smoker	2	3.0%
	Unknown	3	4.6%
Comorbidities			
	Cardio-circulatory disease	18	27.3%
	Arterial hypertension	30	45.5%
	Ischemic cerebral disease	2	3.0%
	COPD	2	3.0%
	Asthma	4	6.0%
	Chronic kidney disease	1	1.5%
	Liver disease	1	1.5%
	Psychiatric disease	7	10.6%
	Cancer (localized)	1	1.5%
	Diabetes	5	7.6%
	BMI (n = 45)	28.44	26.64-32.18
Therapies during hospitalization			
	Remdesivir	4	6.1%
	Tocilizumab	5	7.6%
	Steroids	17	25.8%
	Heparin	24	36.4%
Maximal respiratory support			
	None - Oxygen support	32	48.5%
Need for pressure-positive or mechanical ventilation		23	34.8%
	Mechanical ventilation (OTI)	11	16.7%
Outcome			
	Time-to-negativization (days)	31	24-43
	Duration of hospitalization (days)	12	7-21

Symptoms evolution – physical symptoms



Symptoms evolution – Psychological symptoms

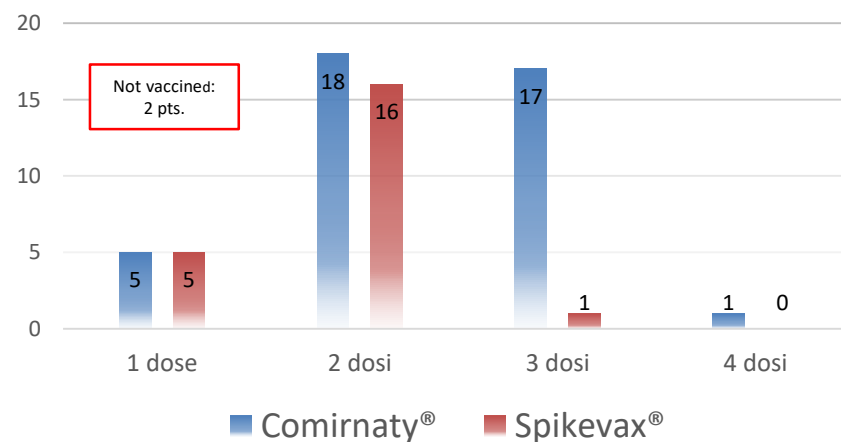
T1 PSYCHOLOGICAL SYMPTOMS



T1 clinical features

Newly diagnosed comorbidities		
Cardio-circulatory disease	2	3,0%
Arterial hypertension	1	1,5%
Ischemic cerebral disease	2	3,0%
COPD	2	3,0%
Asthma	2	3,0%
Chronic kidney disease	1	1,5%
Connective tissue disease	1	1,5%
Liver disease	0	0,0%
Psychological issue/psychiatric disease	61	92,4%
Cancer (localized)	0	1,5%
Diabetes	3	4,6%
Neurological disease	1	1,5%

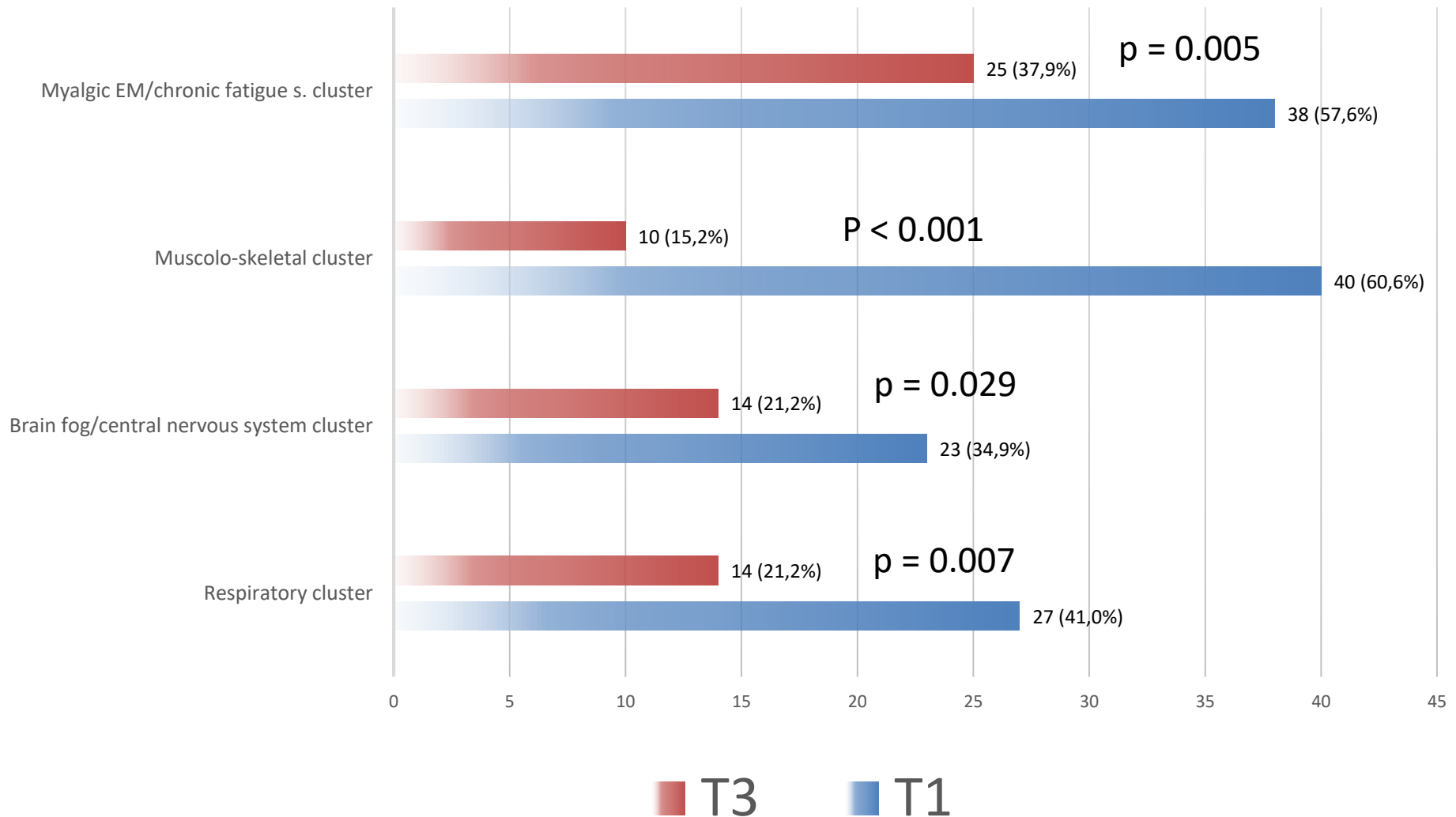
VACCINATION STATUS AT 24+ EVALUATION



10 out of 66 pts. (15,2%) developed a SARS-CoV-2 reinfection, with a median of 715 days (IQR 617-812) from the first episode. No hospitalization was necessary.

Persistence of symptoms after 24+ months

TITOLO DEL GRAFICO



Predictors of PASC condition

Association between severity of acute phase (i.e. max grade of o2 therapy during acute phase) and Long COVID after 24 months by fitting a logistic regression analysis

Parameter	OR	95%CI	p	AOR	95%CI	p
Severity of disease:						
cPAP/NIV/HFNC	1.24	0.428-3.584	0.694	0.29	0.043-2.008	0.211
IOT	2.34	0.554-9.834	0.248	3.95	0.597-26.136	0.154
Age, each year more	1.00	0.951-1.054	0.961	1.01	0.927-1.106	0.782
Gender:						
Female	4.67	1.52-14.32	0.007	26.99	3.49-208.58	0.02
BMI (n 45), each point more	0.99	0.886-1.106	0.860	0.91	0.781-1.07	0.265
Cardiovascular diseases	0.585	0.194-1.766	0.342			
Hypertension	1.118	0.424-2.948	0.822			
Cerebro-vascular diseases	1.064	0.064-17.767	0.965			
Asthma	0.334	0.033-3.383	0.353			
Psychiatric comorbidities	1.476	0.303-7.179	0.629			
Diabetes	1.655	0.258-10.615	0.595			
Comorbidities	1.000	0.3801-2.626	1.000	1.84	0.343-9.842	

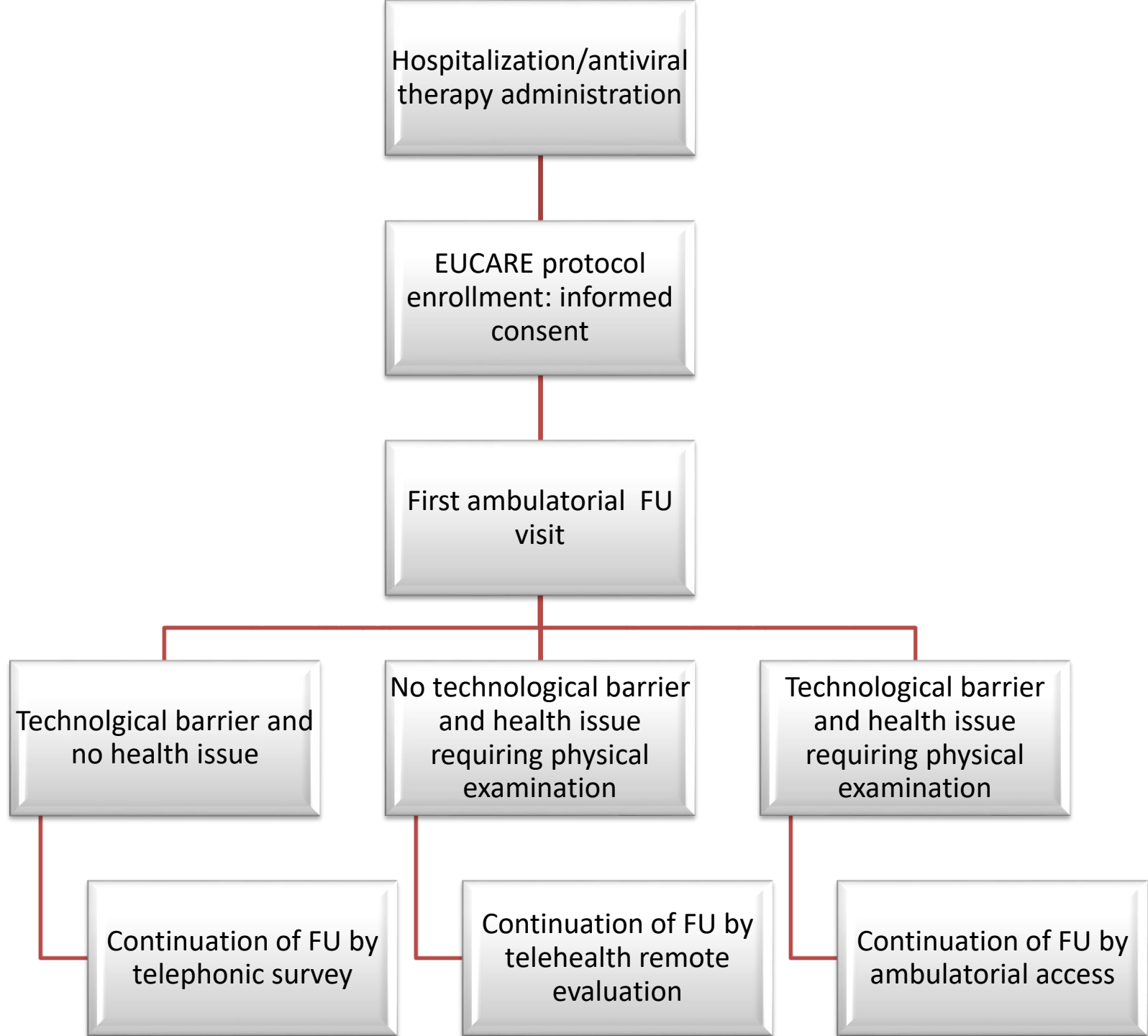
Comorbidities = cardio, cerebro, IPA, respiratorie, psychiatric, DM (yes 33/66, 50%)

- Trend in association between incidence of MEM/CFS cluster symptoms and gender: univariate analysis OR 2,86 (95%CI 0,99-8,26, p-value 0,052).
- No association between brain fog/CNS cluster symptoms, respiratory cluster symptoms or psychologic symptoms and severity of SARS-CoV-2 infection.

Limitations

- Small sample;
- Older pts and foreigners not represented (technological barriers);
- Max O2 therapy as proxy of Severity of SARS-CoV-2 infection;
- PTSD condition not well defined;
- No data on immunodeficient pts. (HIV or oncohematological)





THANK YOU FOR YOUR ATTENTION



Acknowledgements

- Mrs. Anna Maria Cipriano;
 - Dr. Sara De Benedittis;
 - Resident physicians - UO Malattie Infettive Ospedale San Paolo.
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- Dr.ssa Francesca Bai.