

Impact of the COVID-19 pandemic on management of medical cancer treatments and psychological consequence for the patients : the COVIPACT study.

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No conflict interest in link with the topic



COVIPACT study design

ONGOING COVIPACT Study (NCT04366154)

Medical oncological dpt

PATIENTS in OUTPATIENT DEPARTMENT

Study information to patient and information note

If no opposition of the patient to participate

Patient asked to complete self-questionnaires on

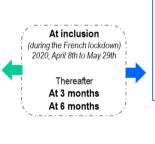
Stress → Perceived Stress Scale

→ Impact of Event Scale-revised (IERS-R)

Sleep quality → ISI

- Quality of Life → Fact-G
- Cognition → Fact-Cog
- Containement questionnaire (at 3 months only)

Data collection on medical records



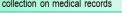
HEALTHCARE PROFESSIONALS in OUTPATIENT DEPARTMENT

Study information to caregiver and information note

If no opposition of the caregiver to participate

Caregiver asked to complete self-questionnaires on Stress → Perceived Stress Scale → Impact of Event Scale-revised (IERS-R) (at 3 months only) Scale of professional exhaustion → Maslach Burnout Inventory (MBI) Feeling of personal efficiency

→ Generalized Self Efficacy Scale, GSES







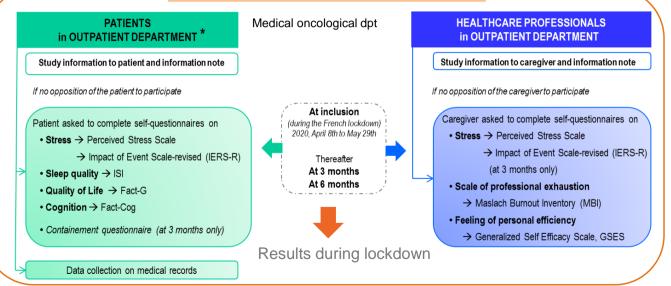


Medical oncological treatment carried out at the day care hospital, initiated before or during the pandemic



COVIPACT study design

ONGOING COVIPACT Study (NCT04366154)



Medical oncological treatment carried out at the day care hospital, initiated before or during the pandemic

lnserm

Anticipe

FONDATION ARC POUR LA RECHERCHE SUR LE CANCER

Plateforme Cancer et Cognition Cancéropôle Nord Oues



Main endpoint:

Proportion of patients with medical oncological treatment modifications in linked with the pandemic situation

Secondary endpoints : psychological impact of the pandemic-related lockdown

Among cancer pts and medical oncologists and oncological day care Unit Caregivers

Questionnaires	Items/ scores	Pts	Caregivers
Perceived Stressed Scale (PSS)	10 items : score 0 to 40 (categorized in Low/Medium/High)	+	+
Impact of Event Scale-Revised Scale (IES-R)	22 items : score 0 to 88 (categorized in Low/Medium/High)	+	-
Sleep difficulty severity (ISI)	7 items : score 0 to 28 (categorized in No or slight/Moderate or severe)	+	-
Quality of life (Fact-G)	27 items grouped in 4 dimensions	+	-
Cognitive complaint (Fact-Cog)	37 items grouped in 4 dimensions	+	-
Professional accomplishment (BMI Scale)	22 items, 3 dimensions categorized in Low/Medium/High)	-	+
Personal Efficiency (GSES)	10 items : score 0 to 40	-	+



Population recrutement during lockdown

ONCO-HEMATOLOGY PATIENTS

Eligibility criteria

-Adult patient, treated for a solid or hematological tumor -Medical oncological treatment carried out at the day care hospital, initiated before or during the pandemic -No opposition from the patient to participate CAREGIVERS IN ONCO-HEMATOLOGY

-Medical oncologist, hematologist, intern, nurse and caregiver in day hospital agreeing to participate

N = 735

N = 73

Sample size (for the main endpoint)

at least 385 patients to estimate the rate of lockdown-induced treatment modifications with 5% margin error

Recruitment (April 8th to May 29th 2020) To date, data collected for **621 patients** (575 questionnaires) for the first baseline analysis during lockdown period



Populations description

Patients : N = 621

	N	(%)
Female	443	(71%)
Median age [range]	64	[24-89]
OMS 0-1*	576	(94%)
Solid tumors	611	(98%)
Primary tumor site		
Breast	273	(45%)
Digestive	105	(17%)
Lung – Head and neck	123	(20%)
Urologic – Genital	25	(4%)
Gynecological	68	(11%)
Other	17	(3%)
Metastatic disease	364	(59%)

Caregivers : N = 73

	Ν	(%)	
Female	59	(81%)	
Median age [range]	40	[22-63]	
Position			
Nurse	35	(48%)	
Nursing assistant	4	(6%)	
Medical oncologist*	23	(31%)	
Resident	5	(7%)	
Other	6	(8%)	
Years of experience			
≤10	36	(49%)	
11-20	18	(25%)	
>20	19	(26%)	

* 7 missing values

* 1 hematologist



Treatments during the lockdown

	Total (n=621)	21) Start of treatment with regard lockdown period		
		during (n=227)	before (n=394)	
Lines of treatments				
First line	295 (48%)	118 (40%)	177 (60%)	
Relapse	328 (52%)	109 (34%)	217 (66%)	
Treatments				
Chemotherapy alone	345 (55%)	160 (46%)	185 (54%)	
Chemotherapy + other*	99 (16%)	36 (36%)	63 (64%)	
Immunotherapy alone	70 (11%)	15 (21%)	55 (79%)	
Targeted therapy +/- other*	97 (16%)	6 (6%)	91 (94%)	
Non anti-cancer treatment	10 (2%)	10 (100%)	0 (0%)	

* Other: immunotherapy or hormonotherapy

Among the *de-novo* treated patients (1st line medical treatment), 33% had a metastatic disease.



% of treatment modifications : Total 27%

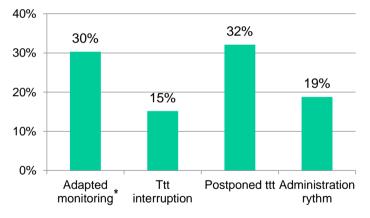
	Total	
	N=165	р
Age		0.16
> 65	72 (29%)	
≤ 65	93 (25%)	
Gender		0.97
Male	48 (27%)	
Female	117 (26%)	
OMS*		0.84
0-1	150 (26%)	
2-3	11 (29%)	
Primary tumor site		<0.001
Breast	75 (27%)	
Digestive	11 (10%)	
Lung – Head and neck	50 (41%)	
Urologic – Genital	5 (20%)	
Gynecological	15 (22%)	
Other	6 (35%)	
Disease status		0.21
Metastatic	103 (29%)	
Localized	59 (24%)	

- More treatment modifications among lung and head and neck cancers pts.
- ~ 25% of pts with modifications whatever the metastatic/localized status.



Type of treatment modifications

Total (n = 165)



*phone consultation and visio consultation

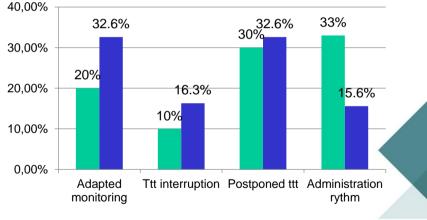
Among the 2 pts with Covid infection : Chemo postponed for 1 pt and no modification of immunotherapy for the other pt



Type of treatment modifications

According to start of treatments with regard to lockdown

- More frequent adapted monitoring among pts with ongoing tt
- More revised rythms of administration for pts who initiated tt during the lockdown



During (n=30) Before (n=135)



% of treatment modifications : Total 27%

	Total	
	N=165	Р
Line of treatments		0.007
First line	63 (21%)	
Relapse	102 (31%)	
Treatments		<0.001
Chemotherapy alone	61 (18%)	
Chemotherapy + other	23 (23%)	
Immunotherapy alone	34 (49%)	
Targeted therapy + other	46 (47%)	

- Less modifications when 1st line TTs.
- Half of immunotherapy treatments have been modified (including 18% interruption, 38% postponed and 38% modified TT rythm*)

- Half of TTs including targeted therapy have been modified (including 39% of tele-or phone consultations and 46% postponed treatments*)
- Only 18% of chemotherapy alone TTs have been modified (including 43% of tele- or phone consultations*)

*Not exclusive



Scores	Total	Pts with ttt modifications		Р
		Yes	No	
Stress related to event (IES-R) (n=575)				0.049
Low	190 (33%)	53 (35%)	137 (32%)	
Medium	263 (46%)	58 (38%)	205 (49%)	
High	122 (21%)	41 (27%)	81 (19%)	
Perceived stress (PSS) (n=571)				0.061
Low	272 (48%)	75 (50%)	197 (47%)	
Medium	265 (46%)	61 (41%)	204 (49%)	
High	34 (6%)	14 (9%)	20 (5%)	
Insomnia (ISI) (n=570)				0.55
No or slight	434 (76%)	111 (75%)	323 (77%)	
Moderate or severe	136 (24%)	38 (25%)	98 (23%)	

- High level of stress among the pts
- Stress related to event more often observed in patients with modified treatments



Patient's Quality-of-life during lockdown

Scores	Total	Pts with ttt modifications		Р
		Yes	No	
FACT-G*				
Global	75.1 (15.5)	74.5 (16.3)	75.3 (15.2)	0.81
Physical	20.8 (5.5)	21 (5.4)	20.7 (5.5)	0.55
Social/Family	21.1 (5.1)	20.7 (5.3)	21.3 (4.9)	0.31
Emotional	16.9 (15.1)	16.7 (5.3)	16.9 (5.1)	0.78
Functional	16.3 (5.7)	16.1 (5.9)	16.4 (5.6)	0.68
FACT-COG*				
PCI	60.1 (12.6)	60 (12.2)	60.1 (12.7)	0.61
QoL	10.6 (4.6)	10.5 (4.6)	10.7 (4.6)	0.5
Oth	15.1 (2)	14.9 (2.2)	15.2 (1.9)	0.12
PCA	19.8 (6.1)	19.6 (5.9)	19.9 (6.2)	0.4

* Fact G: quality of life ; Fact Cog: cognition

No impact of treatment modifications on quality of life of the patients

VIRTUAL ESVO Caregiver emotional, personal and professional accomplishment

	Caregivers
Perceived stress (P	SS)
Continuous score	16.3 (±7.1)
Categorized score	
Low	27 (37%)
Medium	39 (53%)
High	7 (10%)

High level of :

- Perceived stress
 However high level as well of:
- Professional Accomplishment
- Personal self efficacy

	Total
Professional accomplishme	ent (MBI)
Emotional exhaustion	
Low	41 (56%)
Medium	17 (23%)
High	15 (21%)
Depersonalization	
Low	40 (55%)
Medium	19 (26%)
High	14 (19%)
Personal accomplishment	
Low	5 (7%)
Medium	24 (33%)
High	43 (60%)
Personal self-efficacy	
Score (/40)	32.8 (±4.5)



Caregiver emotional, personal and professional accomplishment

	Caregivers	Patients	р	
Perceived stress (PS	SS)			Professional accomplishing
Continuous score	16.3 (±7.1)	14.3 (±7.5)	0.035	Emotional exhaustion
Categorized score				Lov
Low	27 (37%)	272 (48%)	0.17	Mediun
Medium	39 (53%)	265 (46%)	0.17	Higl
High	7 (10%)	34 (6%)		Depersonalization

Higher level of perceived stress among caregivers than among patients.

Professional accomplishment (MBI)			
Emotional exhaustion			
Low	41 (56%)		
Medium	17 (23%)		
High	15 (21%)		
Depersonalization			
Low	40 (55%)		
Medium	19 (26%)		
High	14 (19%)		
Personal accomplishment			
Low	5 (7%)		
Medium	24 (33%)		
High	43 (60%)		
Personal self-efficacy			
Score (/40)	32.8 (±4.5)		

Total



Conclusions

- Among this large series of pts treated with medical oncological treatments during the lockdown period > ¼
 of treatment modifications have been induced by pandemic context whatever the situation of the disease
 (advanced/localized)
 - mainly modification of monitoring follow-up and postponed treatments administrations
 - few interruption of treatments
- Negative impact of treatments modifications on stress related to event among patients
- Even if caregivers expressed a high level of perceived stress during the lockdown period, they reported high levels of self efficacy and professional accomplishment

Perspectives

The Covid-19 pandemic is not over ! ... The next step of the study is the evaluation of the evolution of psychosocial parameters over time (3 and 6 months) after the lockdown among patients and caregivers

We encourage rapid implantation of psychosocial support for ongoing treated cancer patients to promote emotional resilience in order to avoid post-traumatic stress



