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UNIVERSITÀ DEGLI STUDI DI MODENA E REGGIO EMILIA

Department of Medical and Surgical Sciences
Hematology Unit and Chair
(Chief: prof. Mario Luppi)

Esperienza di Integrazione di Cure Palliative Precoci nell'Assistenza Sanitaria:

Leucemia Mieloide Acuta e Mieloma Multiplo

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fondazione GIMEMA onlus
per la promozione e lo sviluppo della ricerca scientifica sulle malattie ematologiche. FRANCO MANDELLI

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Con il patrocinio di

SIE Società Italiana di Ematologia

LE CURE PALLIATIVE PRECOCI IN
EMATO-ONCOLOGIA:
la nuova risposta ai bisogni di pazienti e caregivers

19 maggio 2023 **Roma**, Hotel Donna Camilla Savelli

Disclosures of Leonardo Potenza

Company name	Research support	Employee	Consultant	Stockholder	Speakers bureau	Advisory board	Other
No Conflicts							

Feasibility of EPC Intervention for Patients with Hematologic Malignancies

Study	Intevention	Findings
Selvaggi KJ J Community Support Oncol 2014	HCT Patients. Model of Consultation with Palliative Care Specialists	**392 Consultations** **GOC in 67% of partecipants** **Hospice Referral** increased **from 5% to 41%** post-intervention **Haematologists** reported **satisfaction** with the program
Loggers ET Biol Blood Marrow Transplantation 2016	HCT Patients. PC-trained nurses. PC Consultation before Transplant and monthly visits.	**63% participation rate: 32 pts** **82%** of patients reported feeling **very comfortable** with the Intervention **Improvement of Mood and Sense of Hope** (apparently **NO negative** effects)
Foxwell AM J Palliat Med 2017	PC Nurse practitioners offered discussion of cases with Haematologists	Mean **11 Patients** discussed **per week** **14.7%** of those discussed **required full PC Consult** **Reduction in PC** Consultation **from 19.5% to 10.2%** Increase of **GOC discussions**
Resick JM J Palliat Med 2020	Phase 1 and 2 study. Nurse led PC Intervention	**26 Patients** enrolled. **78%** Consent-to-approach rate**. 84%** enrolled-to-consent rate**. 69%** pts and **100%** caregivers reported that the intervention helped them better understand the patient's illness and **cope. 75%** of **oncologists** reported that the intervention improved their **patients' quality of care,** and **25%** reported that it helped them take **better care of patients.**

Early Palliatiove care Intervention for Patients with Hematologic Malignancies

Study	Intevention	Findings
El-Jawahri A JAMA 2016 JCO 2017	RCT phase III. Patients who received autologous or allogeneic HCT. **Inpatient** PC physician, an AP nurse, or physician assistant.	**160 pts. 81 EPC**, 79 SC. Improvement in QOL, symptom burden, and symptoms of depression and anxiety during HCT. **Sustained improvement** in their depression symptoms and post-traumatic stress symptoms up to 6 months after HCT hospitalization. **Caregivers** reported improvement in their depression symptoms and coping
El-Jawahri A JAMA Oncol 2021	RCT phase III. AML Patients. **Inpatient** PC physician, an AP nurse, or physician assistant.	**160 pts: 86 EPC,** 74 SC. Better QOL, lower anxiety, depression and PTSD symptoms were maintained longitudinally. **Higher frequency** of discussion about **EOL care preferences** (p = 0.01) and **lower frequency of chemotherapy in the last 30 days of life** (p = 0.01). No differences in symptom burden, PHQ-9 scores, and changes in the use of avoidant coping strategies, longitudinally. No differences in hospice use, hospice length of stay, and hospitalization in the last week of life.
Rodin G Support Care Cancer 2020	Single Center phase II trial. **Mainly Inpatient.** 8–12 psychotherapeutic sessions, over 8 weeks by a trained mental health clinician (EASE-psy), and systematic screening of physical symptoms (EASE-phys) with triggered referral to PC. PC team: a physician and nurse.	**Feasibility outcome met** **Less traumatic stress symptoms** at 4 and 12 weeks: p = 0.033 **Lower pain intensity and pain interference** with daily activities at 12 weeks, p = 0.006. **Lower rates of pts with ASD or threshold ASD at 12 weeks.** No differences in physical symptom severity, symptom-related distress, depressive symptoms, satisfaction with care, and overall quality of life.

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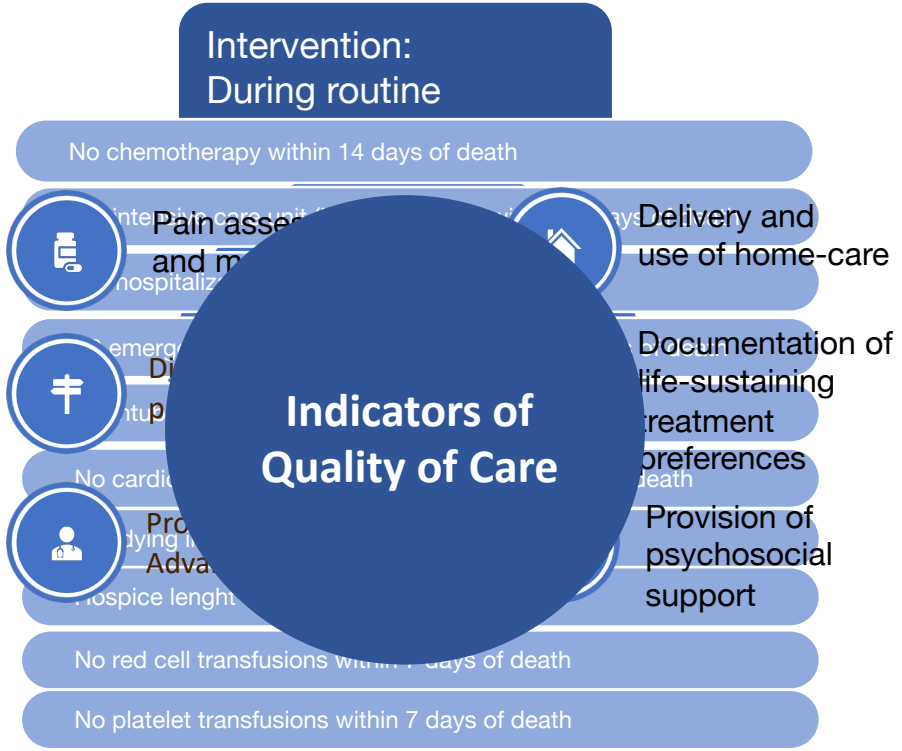
Outpatient EPC in AML: Modena's Observational Study

Outpatient ePC Clinic

- Patients with AML from 2014-2019
- PC Team: one physician, one fellow and one psychologist with specialised training and expertise in delivering palliative care and advanced training in communication skills.
- >3 visits
  Within 8 weeks from Diagnosis



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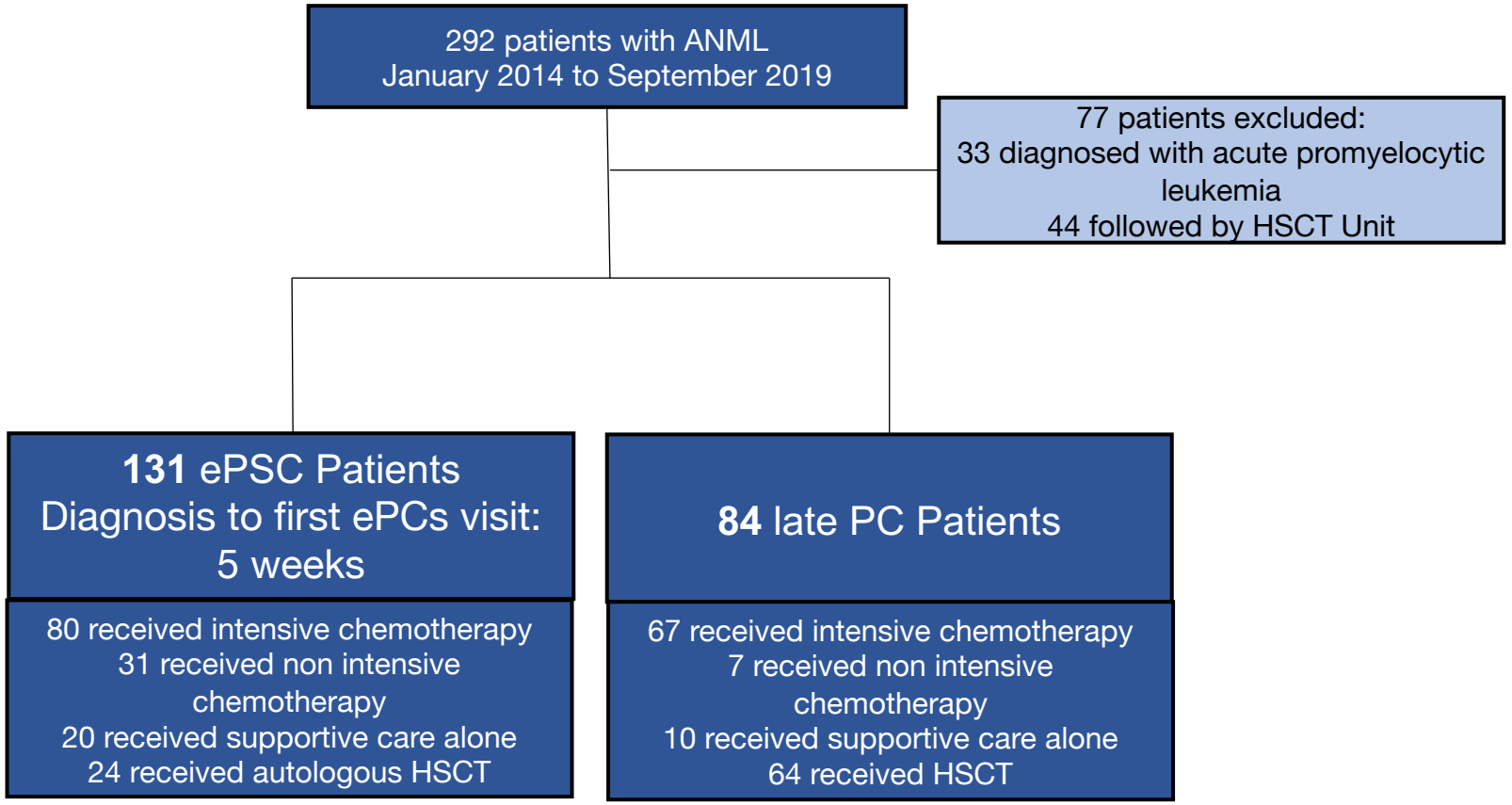
Potenza L *et al*. *BMJ Supportive & Palliative Care* doi:10.1136/ bmjspcare-2021-002898

Outpatient EPC in AML: Modena's Observational Study



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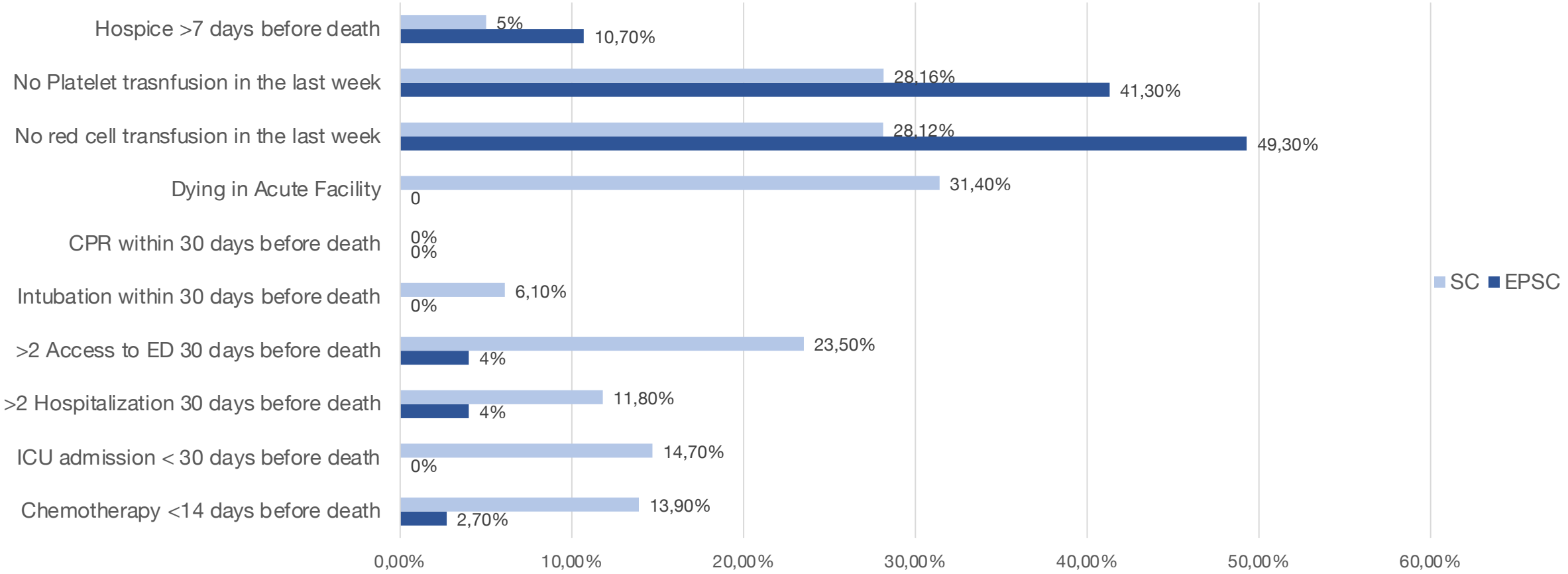
Measures of aggressiveness of end-of-life care in patients with AML receiving EPC or SC



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Quality of Care in AML patients in EPC

	ePSC, all		Late PC, all		RD, % (95% CI)	P value	ePSC, deceased		Late PC, deceased		RD, % (95% CI)	P value
	n/n	%	n/n	%			n/n	%	n/n	%		
Psychological support*, n (%)	72/131	55	41/84	49	61.5 (−7.5 to 19.8)	0.3781	39/75	52	22/40	55	−3 (−22.1 to 16.1)	0.7588
Assessing and managing pain*, n (%)	131/131	100	39/84	46	53.6 (43 to 64.2)	<0.00001	75/75	100	18/40	45	55 (39.5 to 70.4)	<0.00001
Discussion of GOC/ prognosis*, n (%)	94/131	71.8	36/84	43	28.9 (15.8 to 42)	<0.00001	70/75	93.3	16/40	40	53.3 (37.1 to 69.5)	<0.00001
Promotion of ACP*, n (%)	75/131	57.3	2/84	2.3	54.9 (45.8 to 64)	<0.00001	64/75	85.3	2/40	5	80.3 (69.8 to 90.8)	<0.0001
Discussion of resuscitation preference*, n (%)	16/131	12.2	2/84	2.3	9.83 (3.3 to 16.3)	0.01111	15/75	20	2/40	5	15 (3.7 to 26.3)	0.0309
Home-care service utilisation*, n (%)	57/131	43.5	12/84	14.2	29.2 (17.9 to 40.5)	<0.00001	48/75	64	12/40	30	34 (16.1 to 51.9)	0.0005
Median duration of home care, days (range)	63.5 (3.0–3273.0)		53.0 (1–96)				57.0 (3.0–394.0)		53.0 (1–96)			
Median time from GOC to death, days (range)	NA		NA				106 (4.0–585.0)		149.5 (11–1714)			
Median time from ACP to death, days (range)	NA		NA				25 (4.0–401.0)		5.5 (4–7)			

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Pain Management over time in patients with AML receiving EPC

	NRS (0–10)		
	Median	95% CI	P value
Time 0 (baseline)	4	4 to 6	NA
Time 2 (after 1 week)	0	0 to 3	<0.01
Time 3 (after 4 weeks)	0	0 to 1	<0.01
Time 4 (after 12 weeks)	0	0 to 2	<0.01

NA, not applicable; NRS, Numerical Rating Scale.

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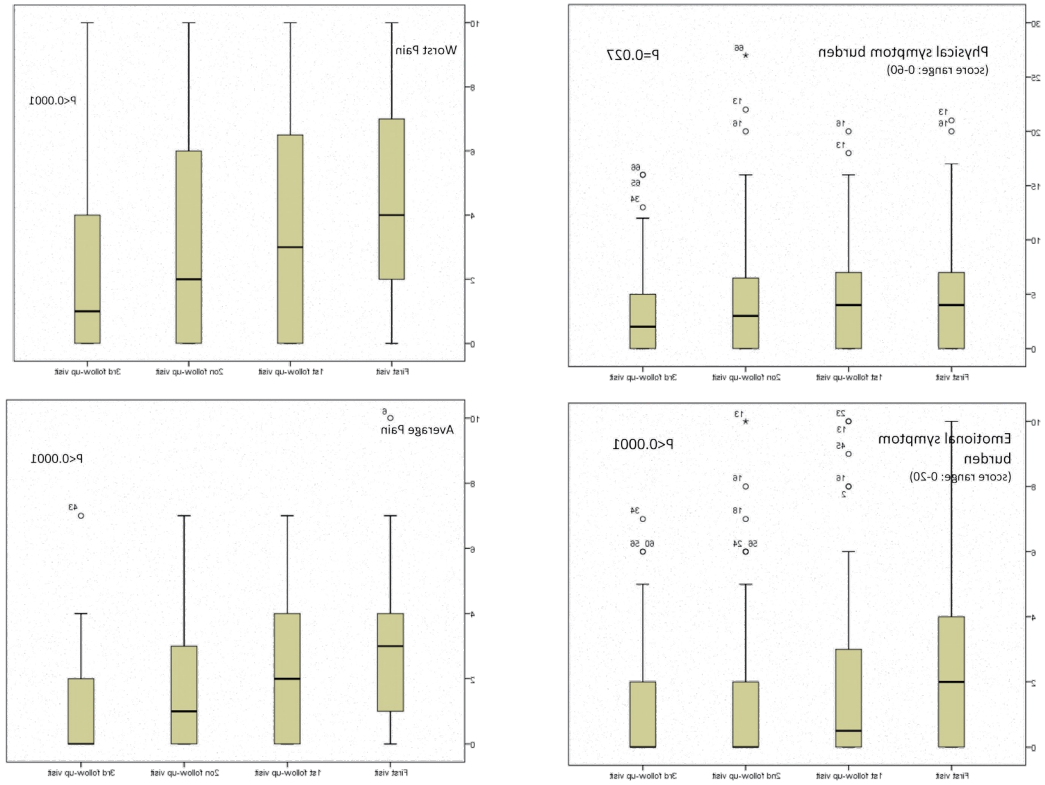
Who are the other hematologic malignancy patients who may benefit the most from early access to PC?

MM Symptom Burden, Perceived Control, and Quality of Life

MM tot Pts	283 (100%)
Eating and nutrition	176 (61%)
Exercising and being physically active	168 (59%)
Moving around (walking, climbing, stairs, lifting, etc.)	159 (56%)
Feeling too tired to do the things you need or want to do	157 (55%)
Pain and/or physical discomfort	150 (52%)
Sleep problems	132 (46%)
Thinking clearly (eg, “chemo brain,” “brain fog”)	134 (46%)
Changes or disruptions in work, school, or home life	121 (42%)
Intimacy, sexual function, and/or fertility	105 (37%)
Worrying about family, children, and/or friends	107 (37%)
Body image and feelings about how you look	103 (36%)

MM may represent a prime example of a population that could potentially benefit

	PATIENTS (N/%)	
TOT	325	
PC Consultation	43 (13.2)	20 (46.5) Diagnosis 15 (34.9) 2nd or more line 8 (18.6) FU
PAIN		39 (90.7)
Ev aluation of Setting		4 (9.3)



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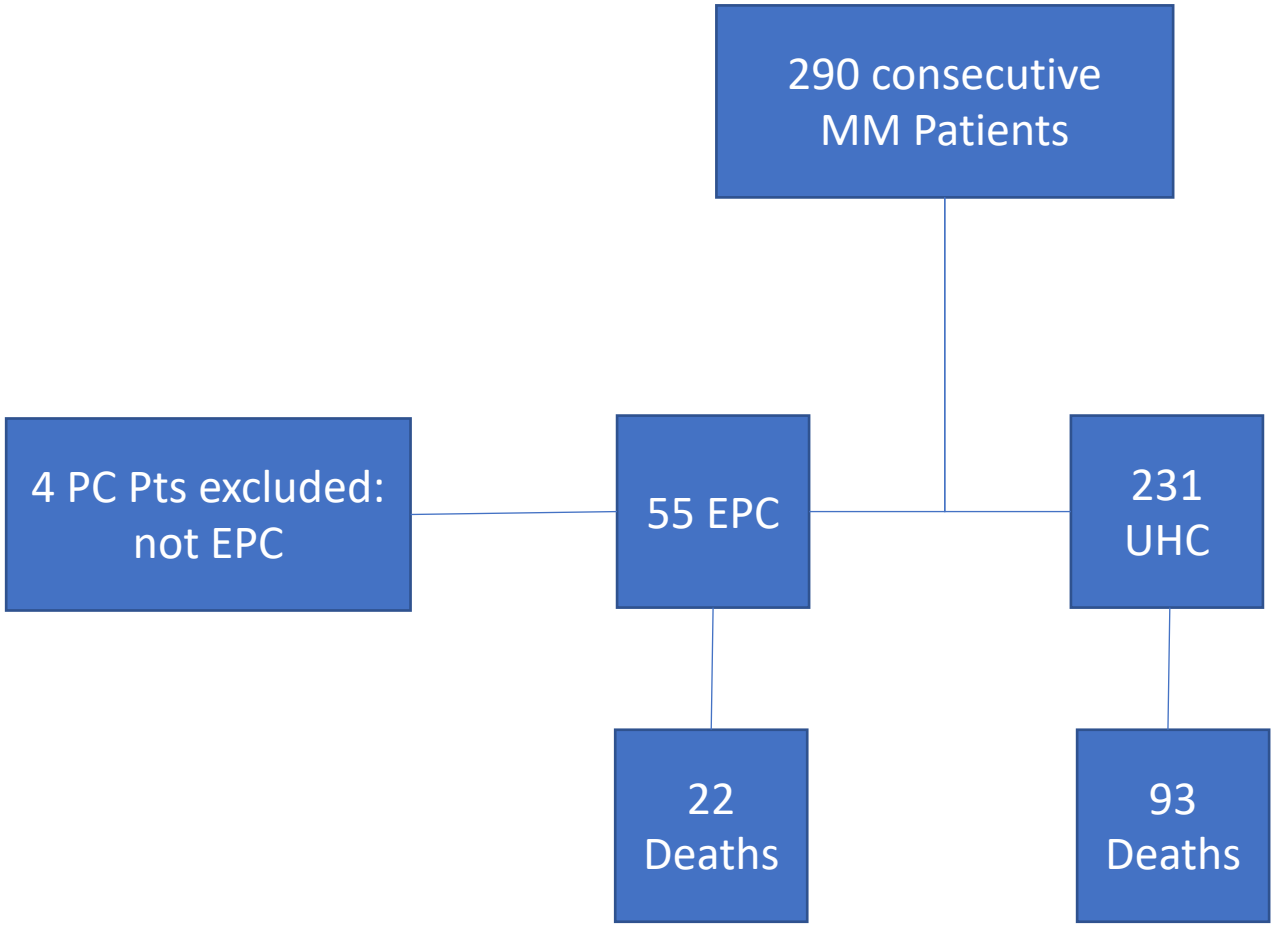
Outpatient EPC in MM: Modena's Observational Study



Giusti D, Potenza L *et al. in preparation*

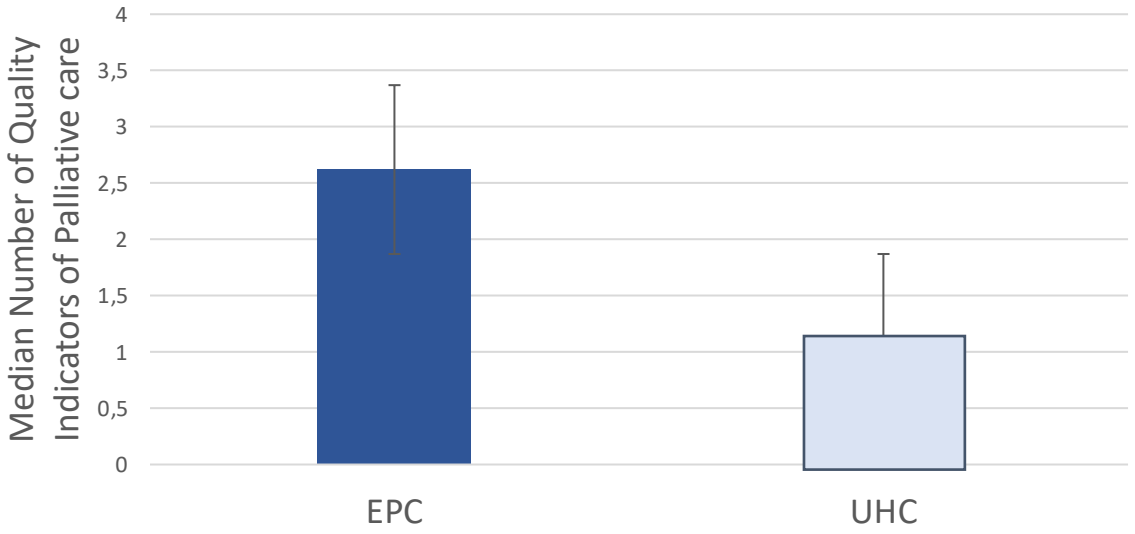
Outpatient EPC in MM: METHODS

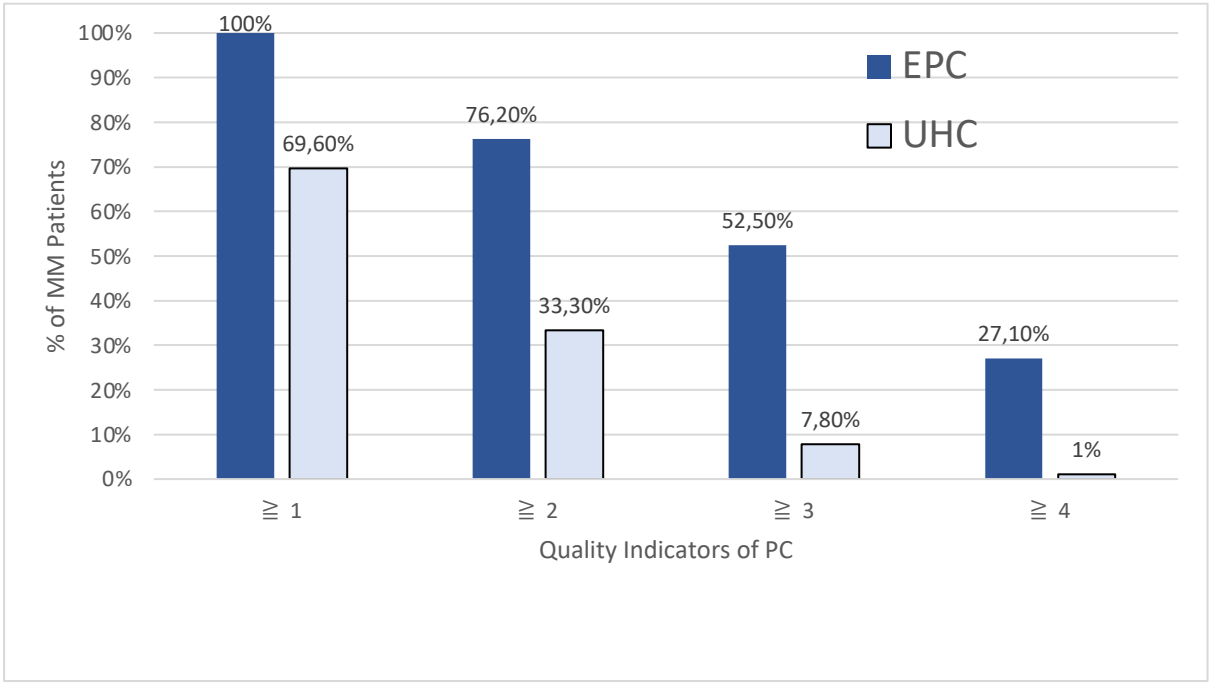
Quality of Palliative Care	Indicators	Aggressiveness at EOL
Pain assessment and management		No chemotherapy within 14 days of death
Provision of psychosocial support		No chemotherapy within 30 days of death
Discussion of GOC		No Intubation within 30 days of death
Promotion of Advance Care Planning		No CPR within 30 days of death
Delivery and use of home-care service		Access to ED ≥2 within 30 days of death
		Hospitalisation ≥2 within 30 days of death
		Hospice
		No Intubation within 30 days of death

Outpatient EPC in MM: RESULTS

	Patients	EPC	UHC
	286	55	231
Age [median (range)]	66.5 (33-93)	67 (33-89)	66 (40-93)
Sex (N/%)			
M/F	161 (56)/ 125 (43)	29 (53)/ 26 (47)	132 (57)/ 99 (43)
Median Follow-up (m)		41	38
MMFS (N/Pts >65y/%)			
Fit	47/157 (30)	13/37 (35.2)	34/120 (28,3)
Unfit	54/157 (34.3)	12/37 (32.4)	42/120 (35)
Frail	56/157 (35.7)	12/37 (32.4)	44/120 (36,7)

Outpatient EPC in MM: Quality Indicators of Palliative Care





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Outpatient EPC in MM: Quality Indicators of Palliative Care

Indicators	EPC N = 55 (%)	UHC N=231 (%)	Measure	Adjusted (95%CI)	p
Psychological Support	64.4	28.6	OR	4.64 (2.41-8.43)	**<0.0001**
Assessing and managing pain	100	68.4	OR	nc	**nc**
Discussion of GOC	74.6	4.3	HR	21.44 (9.75-47.16)	**<0.0001**
Promotion of ACP	13.6	0.0	HR	nc	**nc**
Home-care service utilization	30.5	22.5	HR	1,.1 (0.84-2.71)	0.1638

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Outpatient EPC in MM: Pain Management and Duration of Treatment with Opiates

	Pain Management over time (mean NRS±SD)				
	T0	W1	p	W4	p
EPC	1.86±2.78	1.03±2.24	0.0184	0.41±1.57	**0.001**
UHC	0.93±2.20	0.71±1.69	0.0678	0.73±1.75	0.0608
	Duration of Treatment with Opiates (mean days±SD)		p		
EPC	1061.33±946.45		**0.00007**		
UHC	556±604.02				

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Outpatient EPC in MM: Reduced Aggressiveness at EOL

Indicators	EPC N=22 (%)	UHC N=93 (%)	Adjusted OR (95%CI)	p
No Anti-Myeloma Treatment				
Within 14 days of death	95.5	76.3	8.33 (0.89-100)	0.06
Within 30 days of death	72.7	58.1	2(0.60-6.66)	0.25
No Intubation within 30 days of death	100	96.7	nc	nc
No CPR within 30 days of death	100	98.9	nc	nc
Access to ED ≥2 within 30 days of death	0	2.2	nc	nc
Hospitalisation ≥2 within 30 days of death	9.1	12.9	1.63 (0.24-11.12)	0.61
Hospice	13.6	9.7	0.94 (0.20-4.553)	0.94

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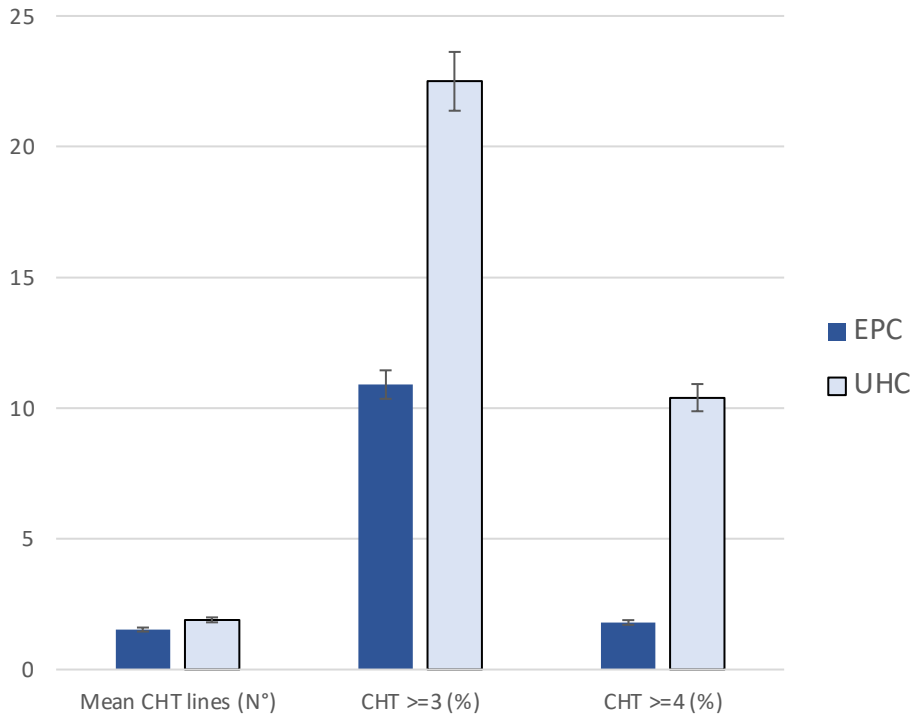
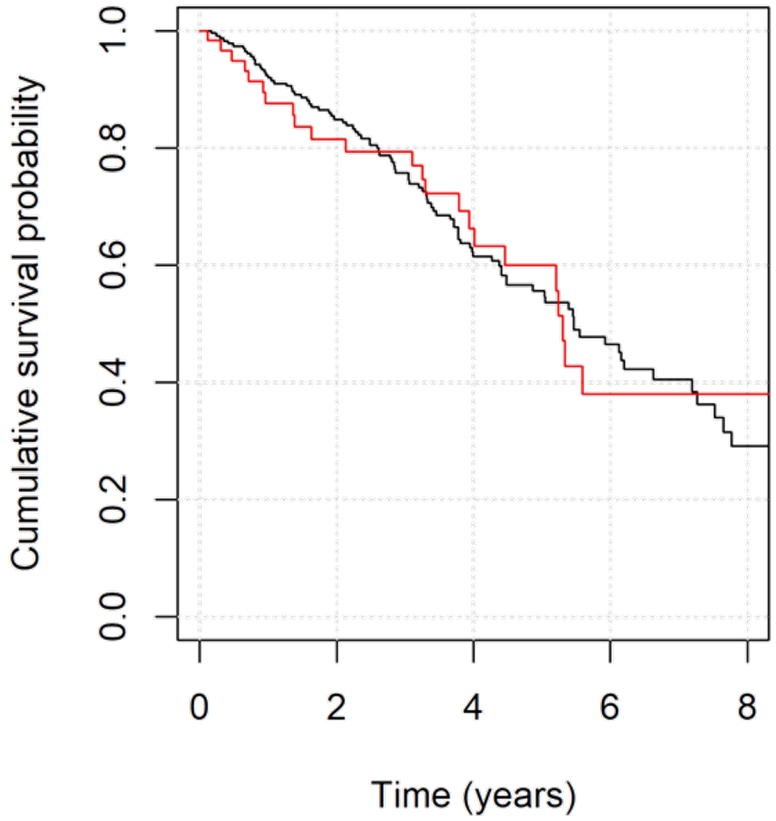
Outpatient EPC in MM: Reduced Aggressiveness at EOL



OS: EPC = 5.3 y; UHC = 5.4 y



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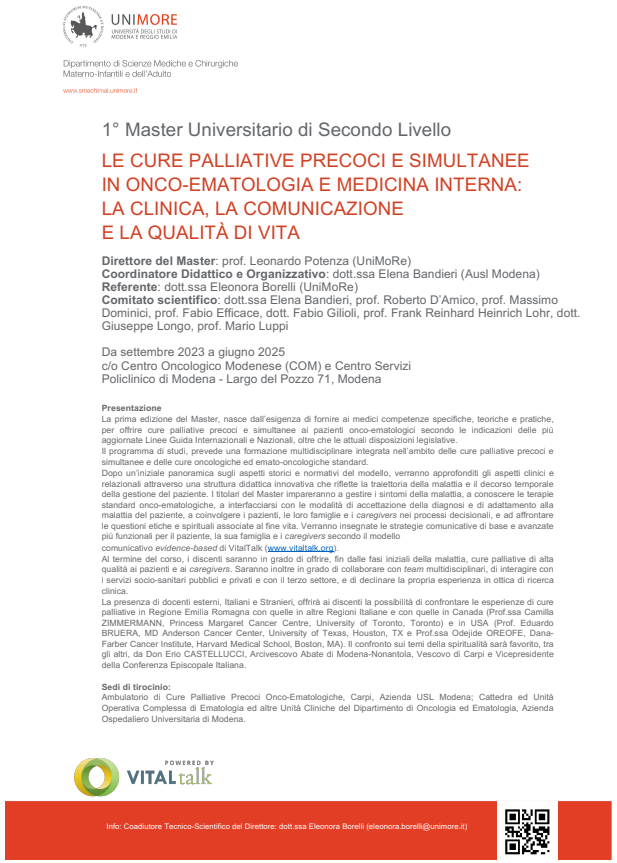
KEY MESSAGES

1. **Our results support and expand the recent data of the literature**, including one phase III RCT, by showing that **EPC** may be delivered to **AML patients** even in the **outpatient** setting.
2. **Real-life EPC in AML** are associated with **high rates of quality indicators** for palliative care and very **low rates of aggressive** treatment near the **end of life**.
3. Our data suggest that **EPC is feasible also in patients with MM** and results in **better quality of care**, including **better management of pain**, more **psychological support**, more frequent **GOC and ACP discussions,** and a **trend to reduced aggressiveness** at the **EOL**.
4. Further **prospective comparative studies** are required to evaluate the effect of **EPC in** patients with **other Hema Cancers**. Efforts are required **to standardize the content of the intervention** and to **improve the availability of Training Program in PC.**

Acknowledgment



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