

Factors influencing patient's quality of life after autologous transplantation, Czech transplantation centers study

Benesova K. (1), Trnkova M. (1), Lanska M. (2), Valkova V. (3), Steinerova K. (4), Koristek Z. (5), Novak J. (6), Raida L. (7), Keslova P. (8), Vackova B. (1), Kruntoradova K. (9), Dolezal T. (9), and Trneny M. (1)

(1) Charles University General Hospital Prague (CZ), (2) Faculty Hospital Hradec Králové (CZ), (3) Institute of Haematology and Blood Transfusion Prague (CZ), (4) Faculty Hospital Plzen (CZ), (5) Faculty Hospital Brno (CZ), (6) University Hospital Kralovske Vinohrady Prague (CZ), (7) Faculty Hospital Olomouc (CZ), (8) Faculty Hospital Motol (CZ), (9) Value Outcomes Prague (CZ)

Background

Autologous transplantation (ASCT) is used for the treatment of lymphoproliferations, in smaller degree for the treatment of some autoimmune diseases and solid tumors. We focused on patients quality of life (QoL) after ASCT, especially on patients suffering from lymphoproliferative disease in our work. We consider this study as very unique project because long-term data about patients quality of life are missing.

Conclusion

The QoL after ASCT is improving during time and it is significantly better in NHL and HL pts compared to the MM patients. Higher age and relapse after ASCT is correlated with worse QoL.

Methods

There were 869 patients incorporated in our study (410 women /47%/ a 459 men /53 %/) with age median 55.2 (10.5-70.6) before ASCT with following diagnoses: 401 pts (46%) non-Hodgkin's malignant lymphoma, 318 pts (37%) multiple myeloma, 74 (9%) pts Hodgkin's disease and others (76 pts, 9%). Questionnaires completing median after ASCT was 4.4 years (0.2-17.2). The FACT-G questionnaire (Q) was used for this analysis. The questionnaire consists of four parts - physical well-being (PWB), social/family well-being (SWB), emotional well-being (EWB), and functional well-being (FWB). The patients completed the Q before the transplantation (at the time of indication or at the time of admission to SCT). Patients were divided into 6 groups - before SCT (207), day +100 up to 1y (72), 1-2y (93), 2-3y (68), 3-5y (142) and more than 5y (287). The clinical characteristics were obtained from national transplant registry DB; the data were cleaned and updated. Wilcoxon and Kruskal-Wallis test were used for statistical analysis. There was no formal control done, but for control we have used the Austrian data of normal responders with 86.6 for total FACT-G (Holzner 2004).

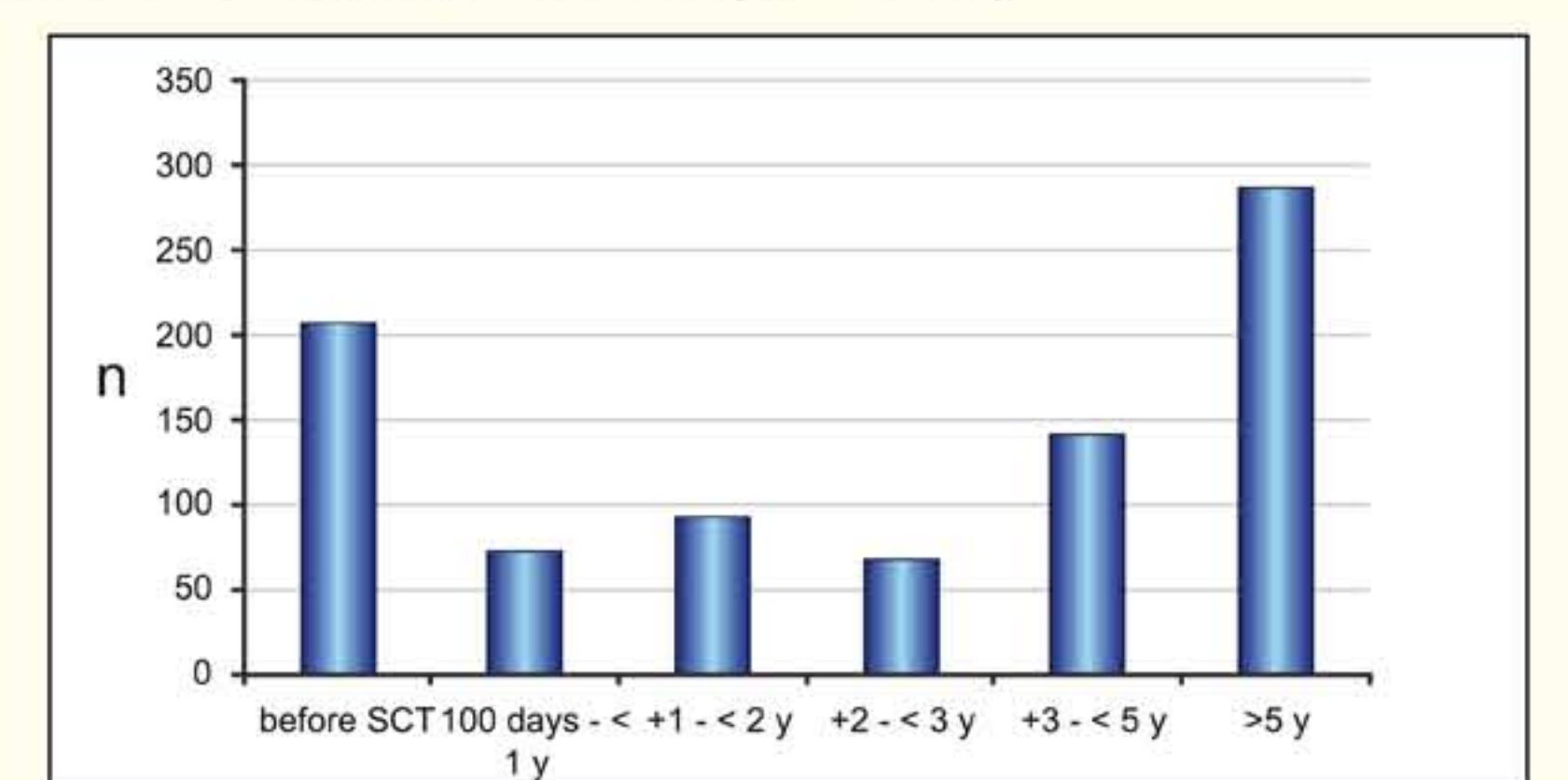
QoL questionnaire 'FACT-G'

			normal values ¹
PWB -Physical well-being	7 questions	28 points	24.9
SWB -Social well-being	7 questions	28 points	20.2
EWB -Emotional well-being	6 questions	24 points	19.5
FWB -Functional well-being	7 questions	28 points	20.4
FACT-G total	27 questions	108 points	86.6

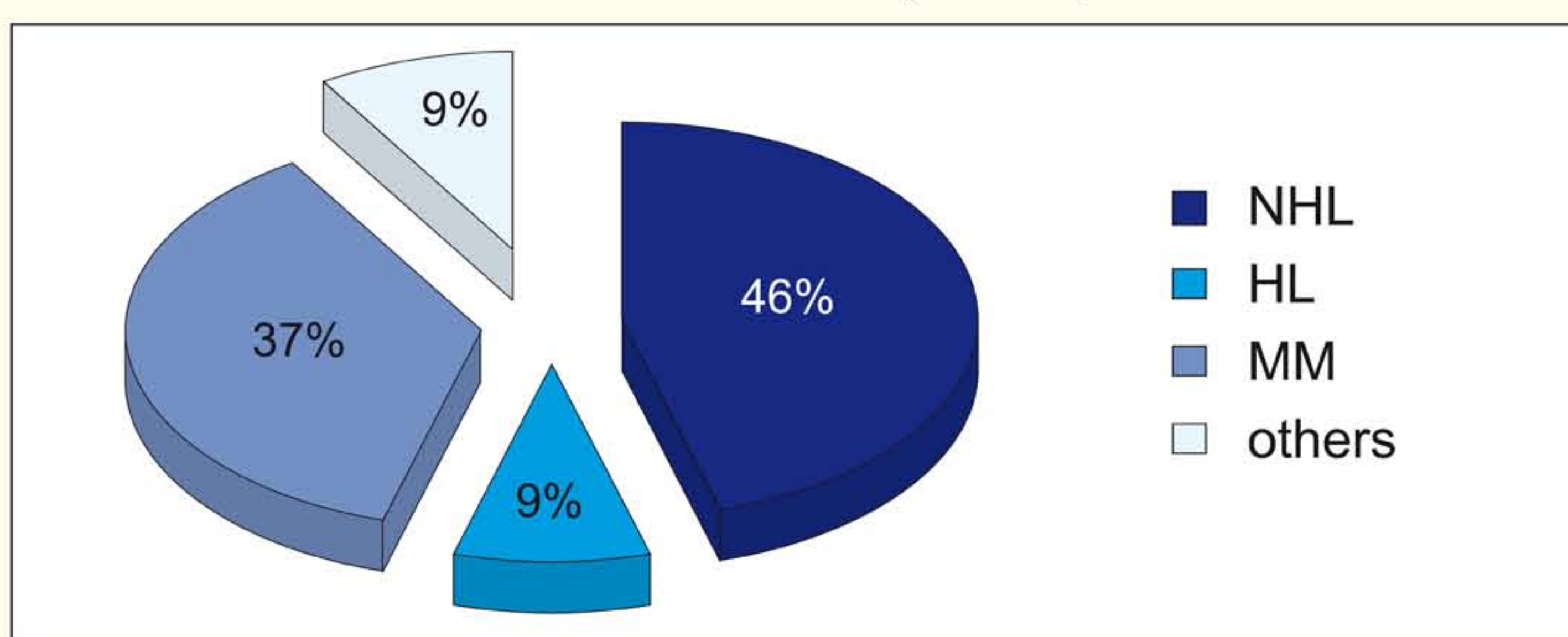
Holzner B et al, Acta Oncol 2004

Timepoints of questionnaires completion (n= 869)

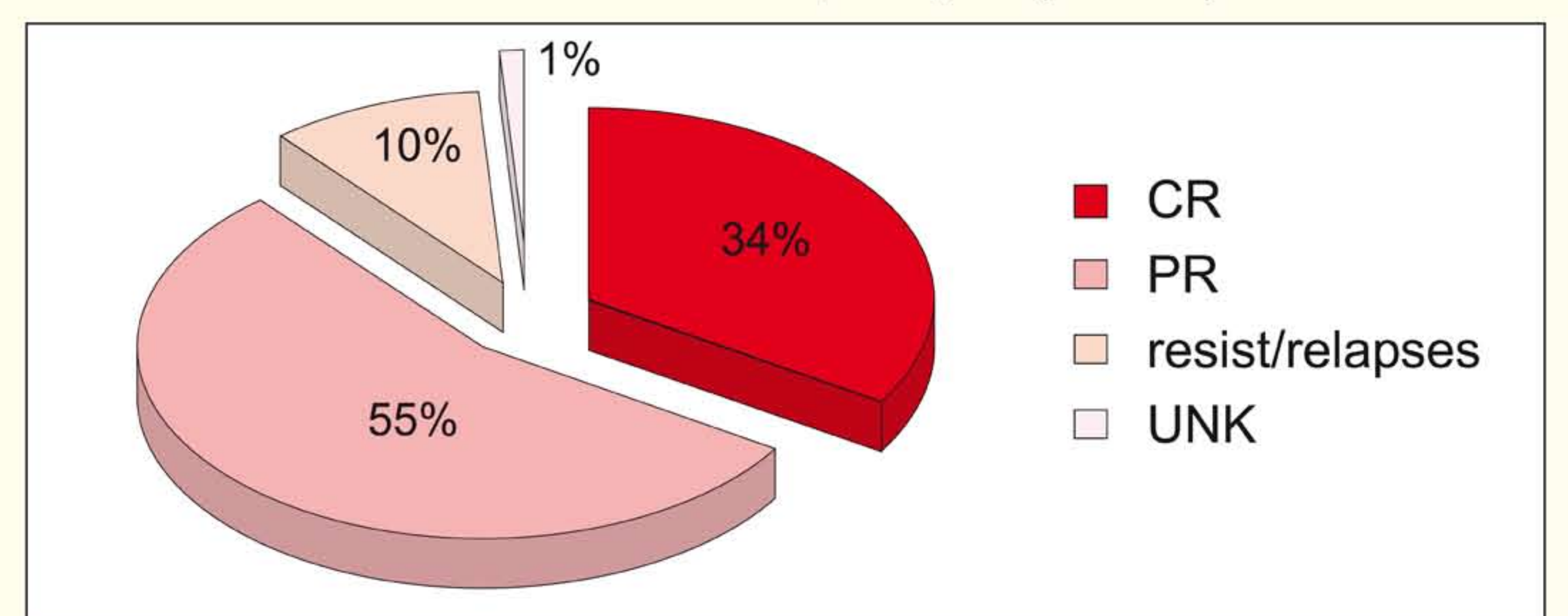
Period	n (%)
beforeASCT	207 (24)
100days- < 1 y	72 (8)
+1- < 2 y	93 (11)
+2- < 3 y	68 (8)
+3- < 5 y	142 (16)
>5 y	287 (33)



Patients characteristic (n = 869)



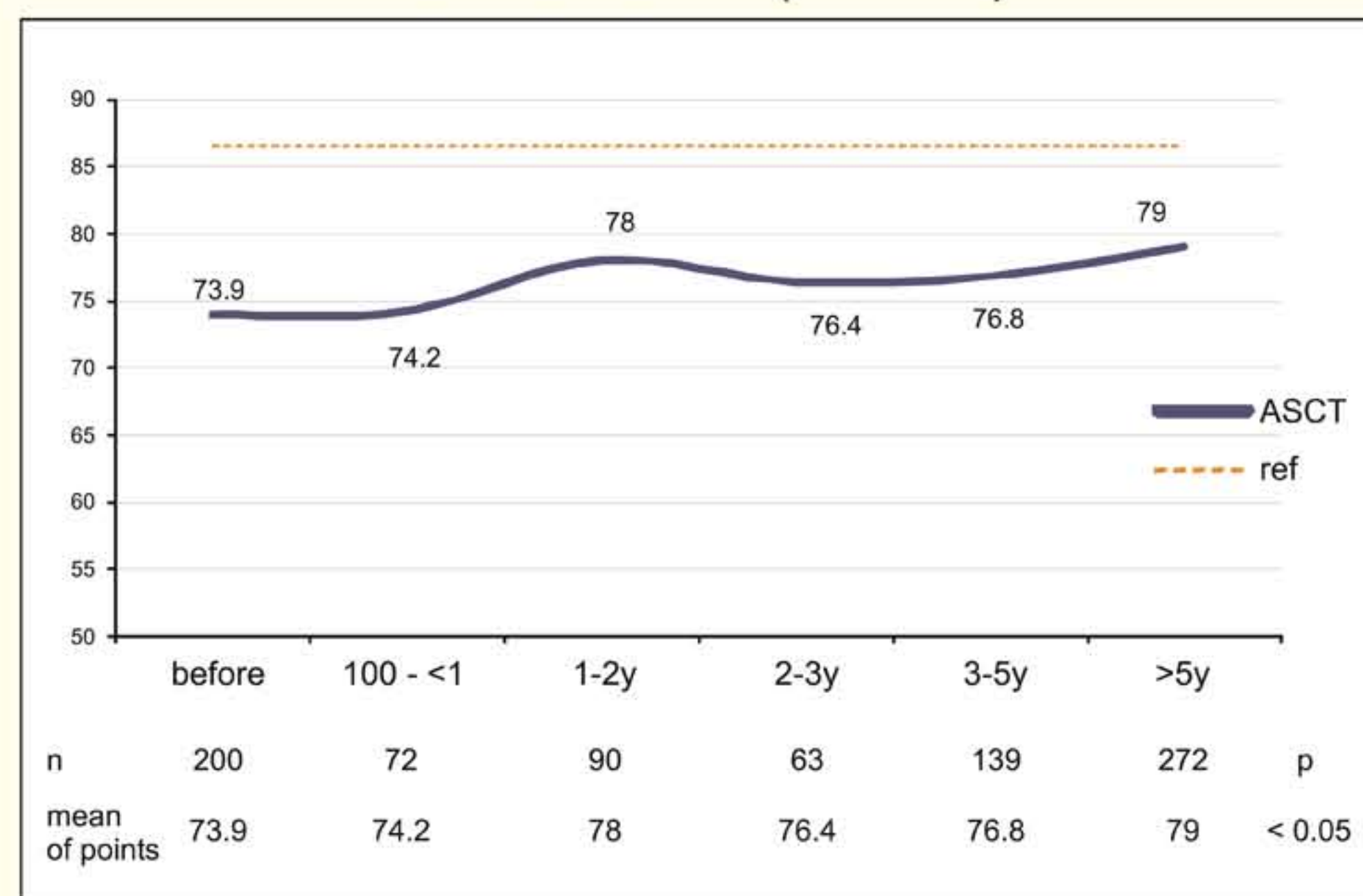
Disease status in MM, NHL, HL (n = 795)



Results

The QoL measured by FACT-G was 73.9 points of the total 108 before ASCT and it has been significantly (<0.01) improved during time after ASCT. It was due to the PWB and FWB (<0.0001 and <0.001 resp.). It was observed in NHL as well HL subgroups, there was however no significant improvement in MM subgroup, in fact there was decrease from score 77.1 at y 1-2 to score 70.9 among the pts > 5y. The QoL FACT-G was influenced by age, diagnosis and relapses. The FACT-G score among long-term survivors (> 5y) was however lower (79.0) compared to the published data (86.6).

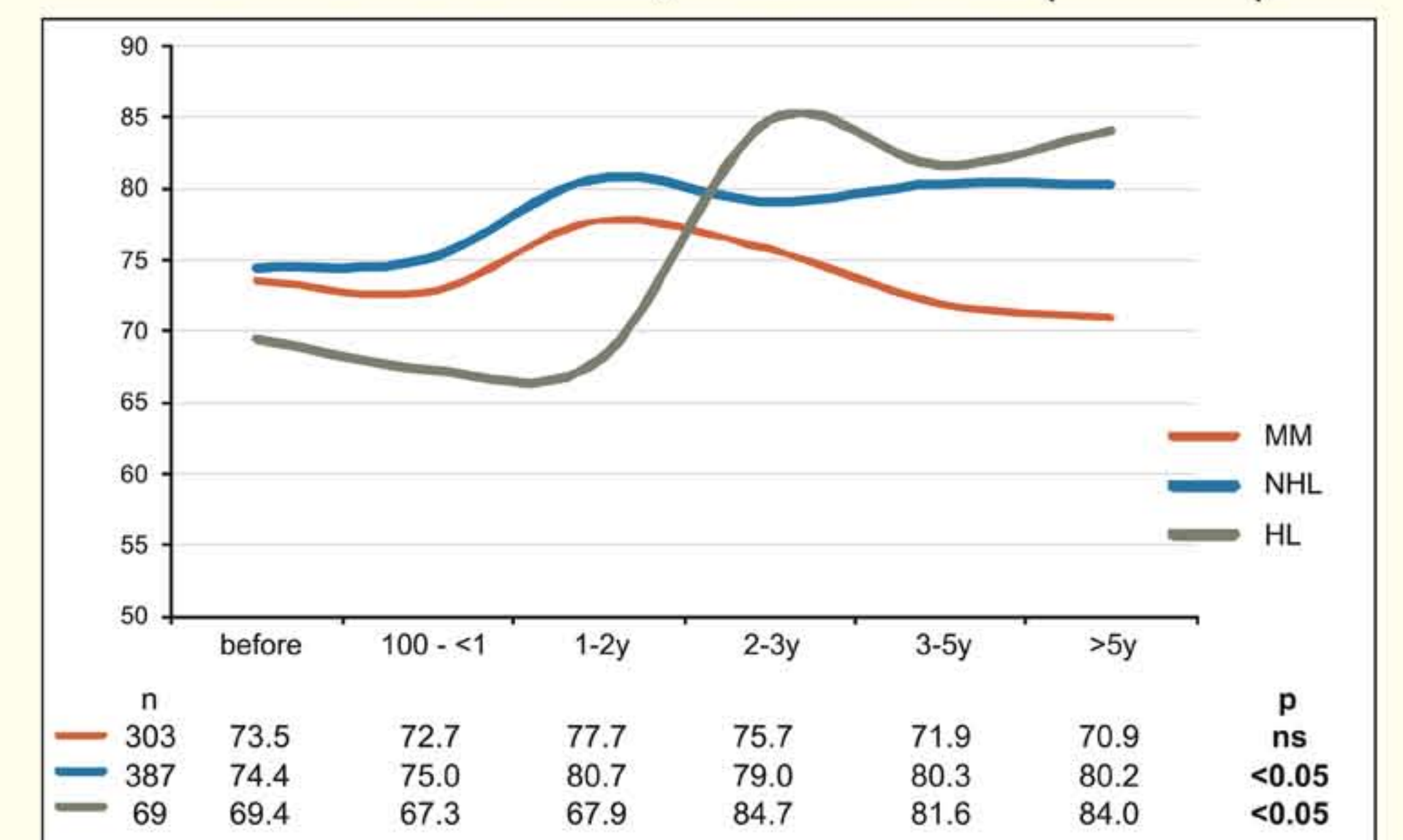
FACT-G ASCT (n = 836)



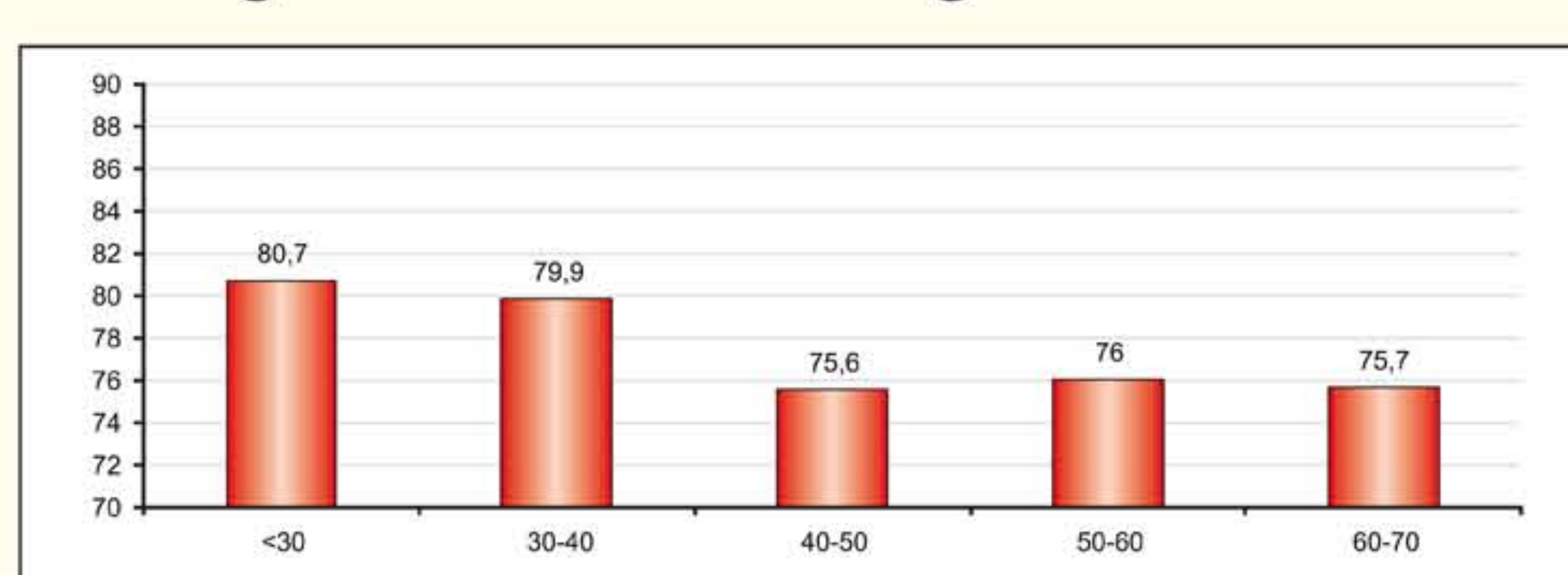
Factors affecting FACT-G in ASCT

parameter	p
gender	ns
age	< 0.01
Dg	< 0.00001
DgSCT interval	ns
Relapse	< 0.05

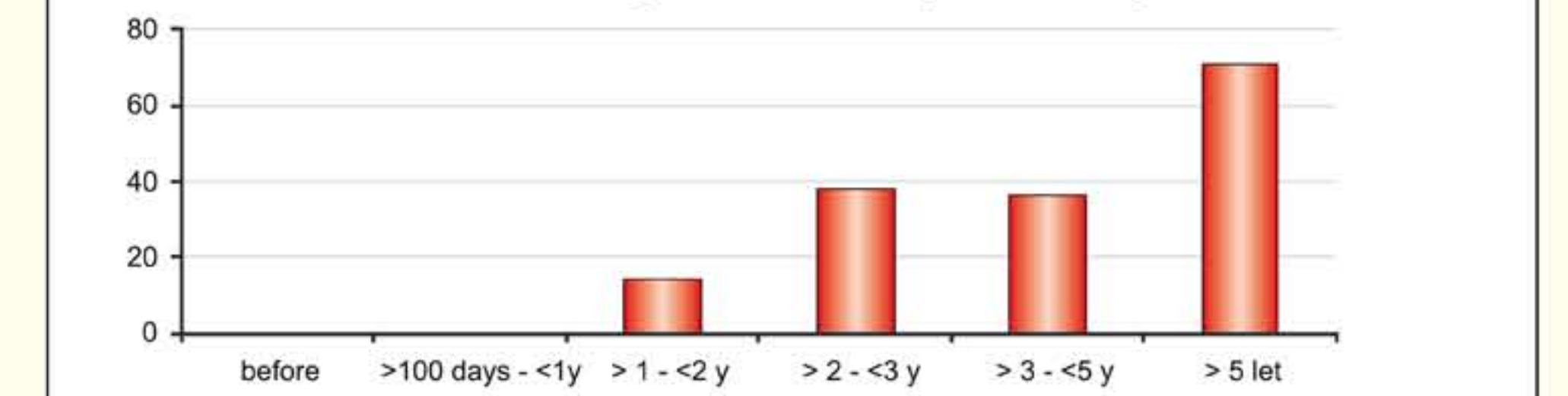
FACT-G ASCT MM, NHL and HL (n = 759)



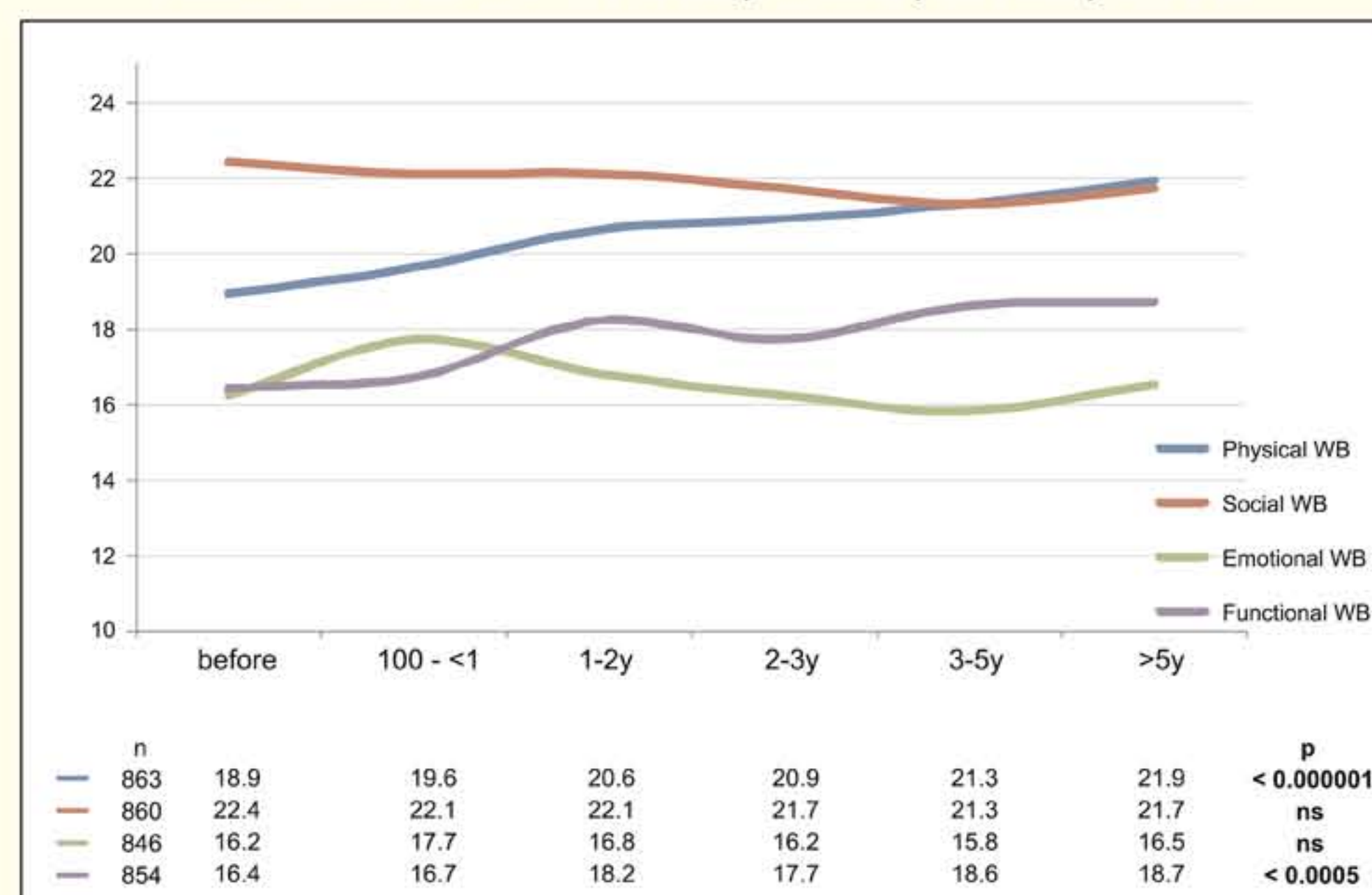
Age and FACT-G in long term survivors



MM % relapses in responded pts



FACT-G ASCT - PWB, SWB, EWB, FWB



Cohort comparison

Parameter	Study cohort		Control cohort		P-value	
	n	%	n	%		
number	869	44.3	1091	55.7	< 0.001	
gender	869	47.2/52.8	1091	47.3/52.7	ns	
ageat ASCT	51.2		43.6		< 0.001	
Dg	MM/NHL/HL/Other	318/401/74/76	36.6/46.1/8.5/8.7	294/484/127/186	26.9/44.4/11.6/17.0	< 0.001
ASCT source	BM/PBPC	5/652	0.8/99.2	9/1069	0.8/99.2	ns
CR at ASCT	MM/NHL/HL	34/212/22	10.8/52.9/30.6	35/253/54	12.2/52.7/43.2	ns
PR at ASCT	MM/NHL/HL	247/158/37	78.7/39.4/51.4	217/206/62	75.9/42.9/49.6	ns
Resistant/relaps at ASCT	MM/NHL/HL	33/31/13	10.0/7.7/18.1	34/21/9	11.9/4.4/7.2	ns
Relapse after ASCT	yes	148	22.4	238	21.8	ns

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