

Introduction

- Myelofibrosis is rare in young patients.
- For young patients, the disease course is often indolent.
- Little is known of factors that contribute to early disease onset and progression in this group.
- Analysis of young patients may reveal keys to pathogenesis of MPNs.

Methods

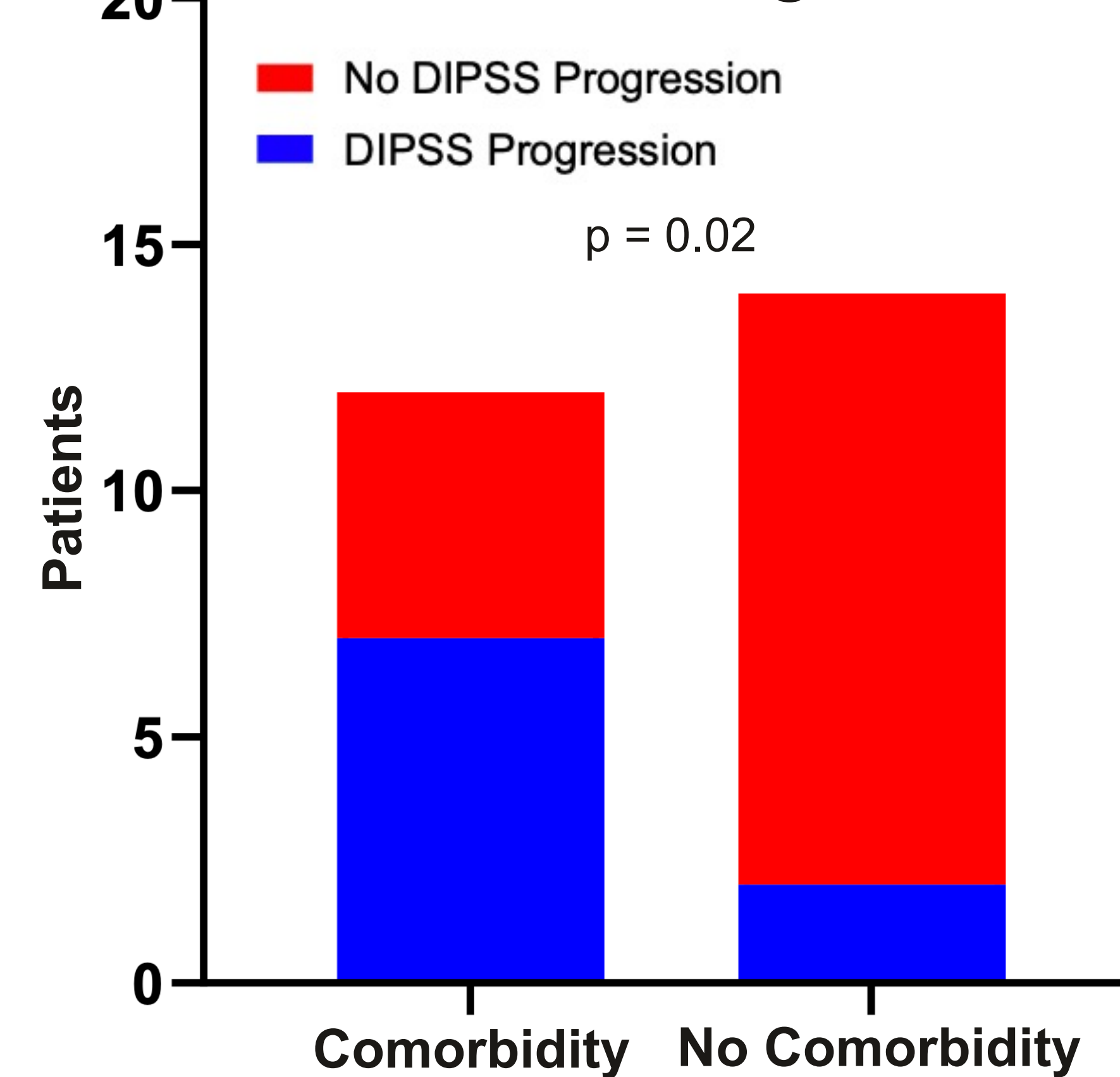
- We identified MF patients who were ≤50 years at the age of diagnosis.
- Patients presented to Moffitt Cancer Center between January 2000 and June 2019.
- Reason for presentation was reported descriptively.
- Comorbid conditions present at diagnosis were classified by etiology.
- DIPSS raw score was calculated from clinical variables (except age).
- Age was excluded given the focus on a young population.
- Change in DIPSS over time was used as a surrogate for clinical disease progression.

Patient Characteristics	MF patients ≤50 years old at diagnosis
n	63
Median age at diagnosis	43.6
Male	24 (38%)
Primary MF	46 (73%)
Secondary MF	17 (27%)
DIPSS at presentation	-
Low	18 (29%)
Int-1	28 (44%)
Int-2	14 (22%)
High	2 (3%)
Reason for presentation (when available)	-
Incidental lab abnormality	36 (62%)
Symptomatic cytopenias	9 (16%)
Incidental splenomegaly	5 (9%)
Disease-related symptoms	5 (9%)
Symptomatic splenomegaly	4 (7%)
Thrombosis	1 (2%)
Comorbidity present at diagnosis	31 (49%)
Cardiovascular/Metabolic	12 (19%)
Autoimmune	10 (16%)
Inflammatory	10 (16%)
Infectious	5 (8%)
Malignancy	1 (2%)
Multiple	6 (10%)
Patients with serial DIPSS at 3 and/or 5 years	26 (41%)
Decrease in DIPSS	9 (35%)
No change in DIPSS	8 (31%)
Increase in DIPSS	9 (35%)

Results and Conclusions

- Most patients presented with low or intermediate-1 risk disease based on DIPSS.
- Incidental lab abnormalities were the most common cause for presentation.
- Cardiovascular/metabolic, autoimmune, and inflammatory diseases were the most prevalent comorbidities in young MF patients.
- Presence of ≥1 comorbid condition correlated with increased disease progression by DIPSS but not with decreased overall survival.
- Increased DIPSS progression correlated with decreased overall survival.
- Inflammatory states may play a role in disease initiation and comorbidities may be helpful in identifying patients at high risk for progression.

Presence of a Comorbidity Correlates with DIPSS Progression



Impact of Comorbid Condition on Overall Survival

