D-dimer were associated with a statistically significantly poorer progression-free survival (PFS) and overall survival (OS; hazard ratio [HR] for 10-ng/mL increase = 1.01 [95% confidence interval {CI}, 1.00-1.02]; $P = .005$ for PFS and HR for 10-ng/mL increase = 1.01 [95% CI, 1.01-1.02], $P = .001$ for OS).

Based on the recursive partitioning algorithm, the best predictive marker of PFS was a D-dimer baseline level at the 161.5-ng/mL cutoff. Among subjects with D-dimer levels <161.5 ng/mL, the model split the subjects into groups depending on D-dimer measured at a subsequent visit (ie, 1 month after starting the BRAFi; cutoff: 349 ng/mL). According to this algorithm, a poorer PFS was found in patients with low baseline D-dimer levels and high D-dimer levels at a subsequent visit (HR = 9.23 [95% CI, 1.28-66.66]; $P = .0276$) and in patients with high D-dimer levels at baseline (HR = 12.18 [95% CI, 2.8-53.09]; $P = .0009$) when compared to patients with low D-dimer levels both at baseline and at a subsequent visit (Fig 1).

In addition, patients with high D-dimer levels at baseline had a poorer OS (HR = 13.40 [95% CI, 1.69-106.79]; $P = .0142$) when compared to patients with low D-dimer levels at baseline and at a subsequent visit (1 month after starting the BRAFi; Fig 1). Finally, tissue TS correlated with circulating TS (Supplemental Table IS and Fig 1). Therefore, among the investigated coagulation biomarkers, only D-dimer showed a statistically significant association with PFS and OS. Should our results be validated in an independent cohort, D-dimer should be incorporated as a stratification biomarker in future clinical trials.

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Distance of travel to phototherapy is associated with early nonadherence: A retrospective cohort study

To the Editor: Phototherapy is an effective management option for many dermatologic diseases.[1,2] Although adherence to a phototherapy regimen is essential for success, few studies have evaluated factors impacting adherence among phototherapy patients.[3] Our retrospective cohort study aimed to identify patient-related factors associated with early non-adherence to phototherapy, in which patients discontinue phototherapy for reasons unrelated to treatment efficacy.

A database of phototherapy patients at Brigham and Women's Hospital (BWH) was generated through a query of a registry of patients with medical documentation at the BWH Phototherapy Center from November 2009 to February 2015. The registry contains information on the total number of phototherapy treatments, treatment indication, reasons for declining treatment, distance to hospital, insurance, and copay, all of which were included in the analysis. All patients in the database had been consented and counseled regarding phototherapy at BWH during an office visit. This study was approved by the Partners Institutional Review Board.

Each patient record generated by the query was individually reviewed. Patients who consented to treatment after November 1, 2014 were excluded to

Table I. Sociodemographic and dermatologic profile of phototherapy patients

N (%)	Overall 479 (100.0%)	Adherent 326 (68.1%)	Early non-adherent 153 (31.9%)	*P* value*
Age at consent to phototherapy				
<50	242 (50.5)	159 (48.8)	83 (54.2)	.264
50+	237 (49.5)	167 (51.2)	70 (45.8)	
Gender				
Female	301 (62.8)	193 (59.2)	108 (70.6)	.016
Male	178 (37.2)	133 (40.8)	45 (29.4)	
Race				
White	245 (52.2)	176 (55.0)	69 (46.3)	.334
Black	88 (18.8)	55 (17.2)	33 (22.1)	
Latino	99 (21.1)	64 (20.0)	35 (23.5)	
Other	37 (7.9)	25 (7.8)	12 (8.1)	
Primary language				
English	413 (86.2)	282 (86.5)	131 (85.6)	.794
Not English	66 (13.8)	44 (13.5)	22 (14.4)	
Education				
High school degree or below	147 (33.4)	100 (32.9)	47 (34.6)	.732
Some college education or above	293 (66.6)	204 (67.1)	89 (65.4)	
Indication for phototherapy				
Psoriasis	194 (40.7)	143 (43.9)	51 (33.8)	.044
Vitiligo	81 (17.0)	56 (17.2)	25 (16.6)	
Atopic dermatitis/eczema	90 (18.9)	62 (19.0)	28 (18.5)	
Other	112 (23.5)	65 (19.9)	47 (31.1)	
Skin type				
A (I-IV)	325 (78.9)	213 (80.7)	112 (75.7)	.232
B (V-VI)	87 (21.1)	51 (19.3)	36 (24.3)	
Distance to phototherapy facility				
<5 miles	220 (46.5)	162 (50.2)	58 (38.7)	.020
5+ miles	253 (53.5)	161 (49.8)	92 (61.3)	
Insurance type				
Public	228 (48.3)	147 (45.4)	81 (54.7)	.059
Private	244 (51.7)	177 (54.6)	67 (45.3)	
Copay				
No copay	420 (89.0)	281 (87.0)	139 (93.3)	.042
Copay	52 (11.0)	42 (13.0)	10 (6.7)	

Unknown values: N = 6 missing distance to hospital; N = 7 missing insurance; N = 7 missing copay; N = 67 missing skin type; N = 2 missing diagnosis; N = 10 missing values for race; N = 39 missing values for education.
**P* value from chi-square tests.

allow for sufficient time to evaluate adherence. All patients included in the analysis were reviewed to collect variables such as age, gender, race, language, education, Fitzpatrick Skin Type, and the alternative treatment(s) initiated for non-adherent patients immediately after discontinuing phototherapy. The primary outcome of early non-adherence was defined as attending ≤6 phototherapy sessions.

Chi-square tests were used to assess the statistical significance of differences between groups. Bivariate logistic regression models were used to calculate unadjusted odds ratios for variables associated with non-adherence. The collinearity of independent variables was determined via the variance inflation factor. Skin type and copay were found to be co-linear with race and insurance and were not included in logistic regression models. The final multivariable logistic regression model was used to compute adjusted odds ratios for variables associated with non-adherence. In a sensitivity analysis, patients who declined due to adverse medical reactions were excluded from the model, yielding qualitatively similar results. Statistical analysis was conducted using SAS Software (Cary, NC).

Of the 479 patients included in the analysis, 326 (68.1%) were adherent, and 153 (31.9%) were non-adherent (Table I). Of the early non-adherent