Supplementary Table S1. Spearman correlation analysis between the SF-36 domains and core set measures at baseline.

SF-36 domain scores	CSMs correlation coefficient (rho)					
	EXGLB	**PhGA**	**PtGA**	**HAQ**	**MMT-8**	**CK**
Physical functioning	**-0.22***	**-0.57****	**-0.62****	**-0.76****	**0.49****	-0.25
Role physical	**-0.27****	**-0.41****	**-0.46****	**-0.51****	**0.38****	-0.14
Role emotional	**-0.28****	**-0.38****	**-0.33****	**-0.33***	**0.32****	-0.19
Vitality	-0.20	**-0.38****	**-0.56****	**-0.58****	**0.35****	-0.23
Mental health	-0.10	-0.18	**-0.23***	**-0.28****	0.12	-0.28
Social functioning	-0.20	**-0.42****	**-0.53****	**-0.57****	**0.34****	-0.21
Bodily pain	-0.20	**-0.41****	**-0.52****	**-0.60****	**0.38****	-0.18
General health	**-0.33****	**-0.38****	**-0.34****	**-0.42****	0.13	0.05
PCS	**-0.23***	**-0.51****	**-0.61****	**-0.72****	**0.43****	-0.11
MCS	**-0.23***	**-0.29****	**-0.29****	**-0.26****	0.19	-0.21

* Correlation is significant at the 0.05 level.
** Correlation is significant at the 0.01 level.
SF-36: short form 36; CSMs: core set measures; CK: creatine kinase; HAQ: health assessment questionnaire; MMT-8: manual muscle testing 8; EXGLB: extra-muscular disease activity; PtGA: patient-global assessment; PhGA: physician-global assessment; PF: physical functioning; RP: role physical; BP: bodily pain; GH: general health; VT: vitality; SF: social functioning; RE: role emotional; MH: mental health; PCS: physical component summary; MCS: mental component summary.

Supplementary Table S2. Spearman correlation analysis between the delta change of SF-36 domains, core set measures (CSMs), and total improvement score (TIS) at 6 months.

SF-36 domain scores	CSMs correlation coefficient (rho)						
	EXGLB	**PhGA**	**PtGA**	**HAQ**	**MMT-8**	**CK**	**TIS**
Physical functioning	**-0.33****	**-0.49****	**-0.32****	**-0.64****	**0.45****	-0.28	**0.51****
Role physical	**-0.28***	**-0.25***	**-0.48****	**-0.39****	0.18	-0.22	**0.38****
Role emotional	**-0.36****	**-0.39****	**-0.30***	**-0.47****	**0.29***	**-0.30***	**0.48****
Vitality	**-0.35****	**-0.38****	**-0.26***	**-0.50****	**0.33****	**-0.47****	**0.51****
Mental health	**-0.29***	**-0.29***	-0.24	**-0.38****	0.04	**-0.34***	**0.34***
Social functioning	**-0.26***	**-0.41****	**-0.40****	**-0.54****	0.20	**-0.33***	**0.60****
Bodily pain	**-0.37****	**-0.31****	**-0.34****	**-0.52****	0.22	-0.17	**0.40****
General health	**-0.32****	**-0.25***	**-0.25***	**-0.35****	**0.27***	-0.23	**0.41****
PCS	**-0.33****	**-0.36****	**-0.40****	**-0.56****	**0.37****	-0.19	**0.45****
MCS	**-0.38****	**-0.42****	**-0.28***	**-0.50****	0.23	**-0.48****	**0.53****

* Correlation is significant at the 0.05 level.
** Correlation is significant at the 0.01 level.
SF-36: short form 36; CSMs: core set measures; CK: creatine kinase; HAQ: health assessment questionnaire; MMT-8: manual muscle testing 8; EXGLB: extra-muscular disease activity; PtGA: patient-global assessment; PhGA: physician-global assessment; TIS: total improvement score; PF: physical functioning; RP: role physical; BP: bodily pain; GH: general health; VT: vitality; SF: social functioning; RE: role emotional; MH: mental health; PCS: physical component summary; MCS: mental component summary.

Supplementary Table S3. Mixed linear model analysis of the longitudinal relationship between core set measures (CSMs) and SF-36 domain changes at 6 months in IIM patients (adjusted for age, sex and race).

Variable absolute change at 6 months:	EXGLB	PhGA	PtGA	HAQ	MMT-8	CK
Physical functioning	-3.99**	-4.56**	-3.02**	-26.64**	0.61	-0.49**
Role physical	-4.29**	-5.01**	-4.47**	-29.25**	0.46	-0.59*
Role emotional	-4.08**	-4.77**	-2.76**	-19.82**	-1.18	-0.85**
Vitality	-3.07**	-3.21**	-3.11**	-16.57**	-0.51	-0.63**
Mental health	-1.27*	-1.60**	-1.11**	-6.80**	1.01	-0.21
Social functioning	-2.46**	-3.29**	-3.23**	-20.20**	-0.83	-0.57**
Bodily pain	-3.02**	-3.36**	-3.38**	-19.42**	-0.49	-0.74**
General health	-2.55**	-2.43**	-1.65**	-9.13**	1.68	-0.15
PCS	-1.56**	-1.59**	-1.41**	-9.99**	0.25	-0.22**
MCS	-0.90**	-0.95**	-0.67**	-4.00**	0.03	-0.19**

* Correlation is significant at the 0.05 level.
** Correlation is significant at the 0.01 level.
CK: creatine kinase; HAQ: health assessment questionnaire; MMT-8: manual muscle testing 8; EXGLB: extra-muscular disease activity; PtGA: patient-global assessment; PhGA: physician-global assessment; PF: physical functioning; RP: role physical; BP: bodily pain; GH: general health; VT: vitality; SF: social functioning; RE: role emotional; MH: mental health; PCS,:physical component summary; MCS: mental component summary.