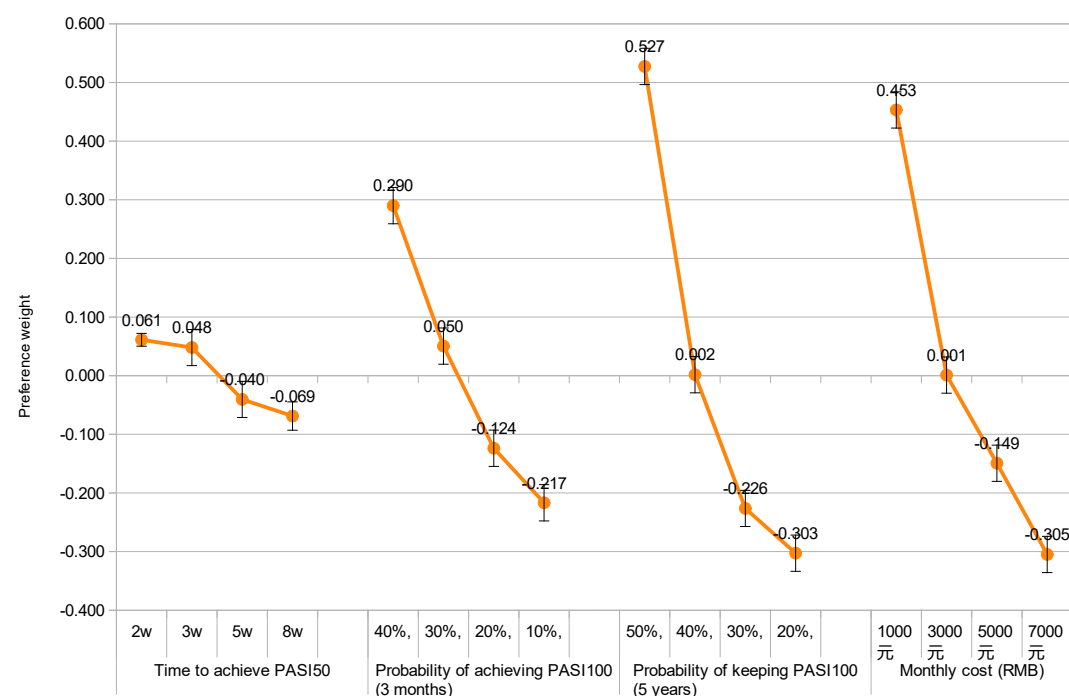


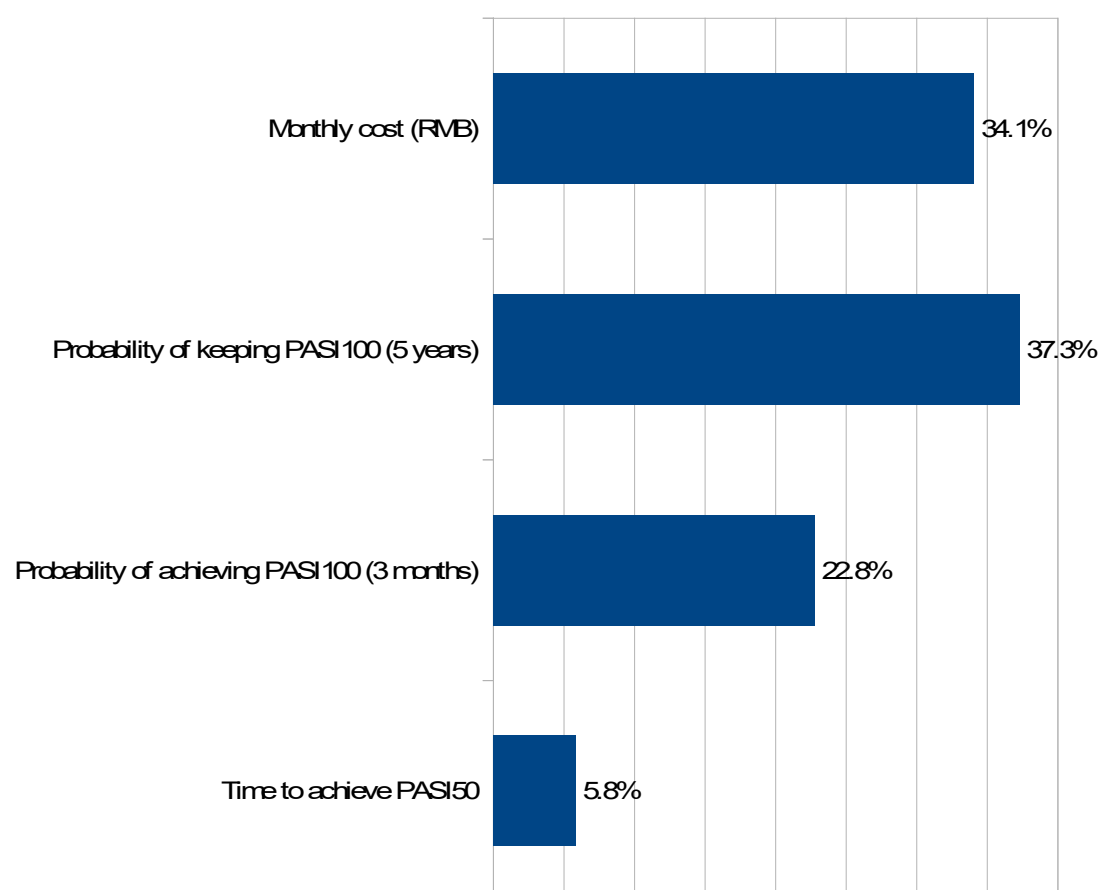
Supplementary materials: Preference weights and relative importance of attributes analyses in disease location subgroup

Toes and feet subgroup (n=56)

Preference weights derived from the attribute levels showed that the Toes and feet subgroup favored the probability of keeping PASI100 at 5-years, the lower cost of biologic treatments, the probability of achieving PASI100 at 3 months and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment (Figure 1). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 0.76, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.83, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.51, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.13, respectively. Across this subgroup (Figure 2), the attribute regarded as the most important was probability of keeping PASI100 at 5-years (relative importance [RI]: 37.3%), the monthly cost (RI: 34.1%), probability of achieving PASI100 at 3 months (RI: 22.8%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 5.8%), respectively.



Supplementary Figure 1. Preference weights for attribute levels in Toes and feet subgroup. Preference weights are showed on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.

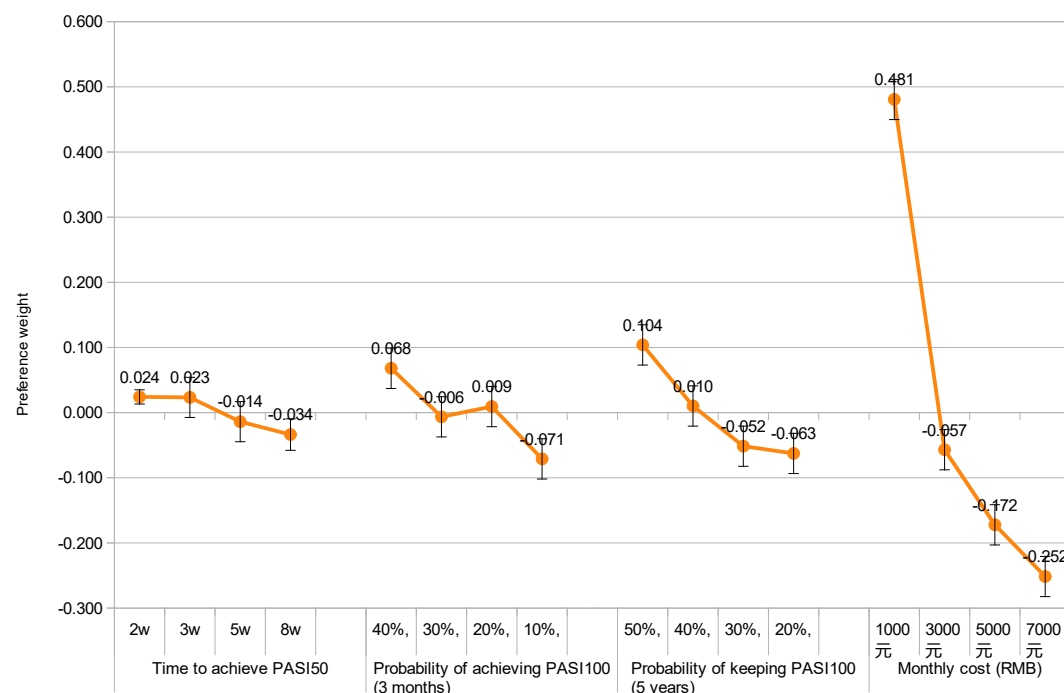


Supplementary Figure 2. Relative importance of attributes in Toes and feet subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

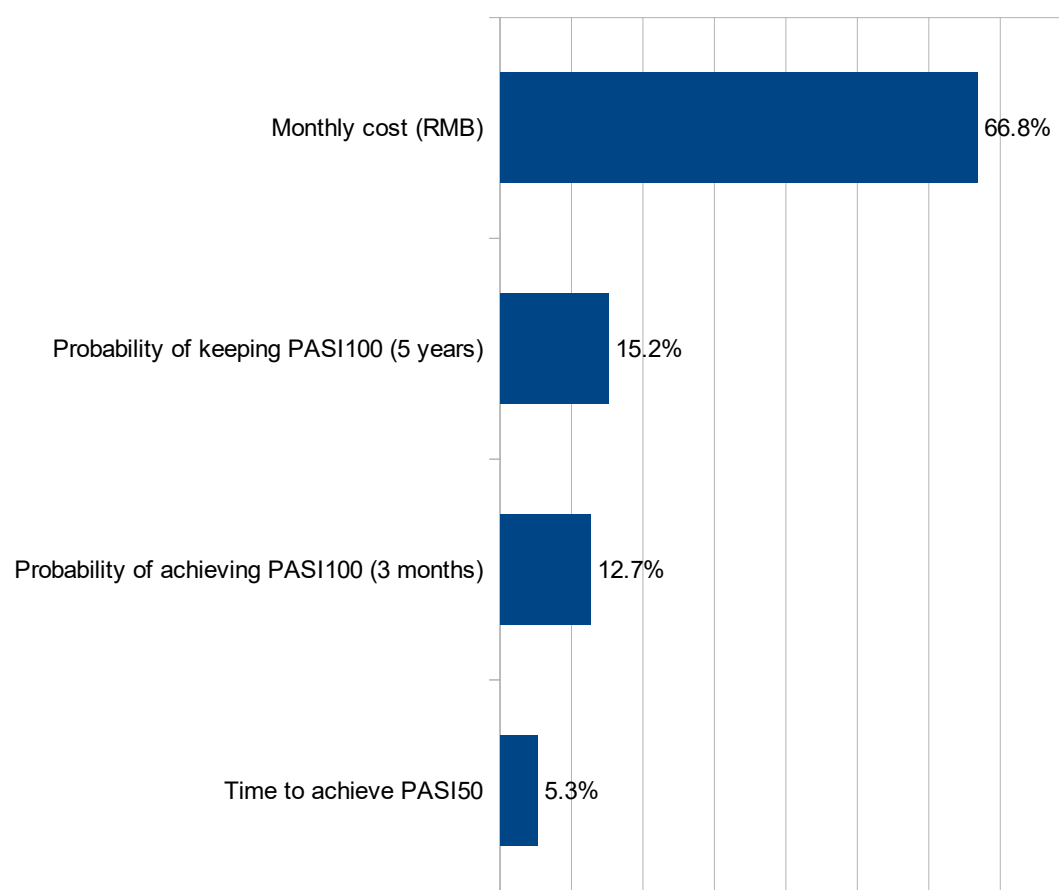
Legs or hips subgroup (n=140)

Preference weights derived from the attribute levels showed that the Legs or hips subgroup favored the lower cost of biologic treatments, the probability of keeping PASI100 at 5-years, the probability of achieving PASI100 at 3 months and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment (Figure 3). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 0.73, whereas

improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.17, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.14, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.06, respectively. Across this subgroup (Figure 4), the attribute regarded as the most important was the monthly cost (RI: 66.8%), probability of keeping PASI100 at 5-years (RI: 15.2%), probability of achieving PASI100 at 3 months (RI: 12.7%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 5.3%), respectively.



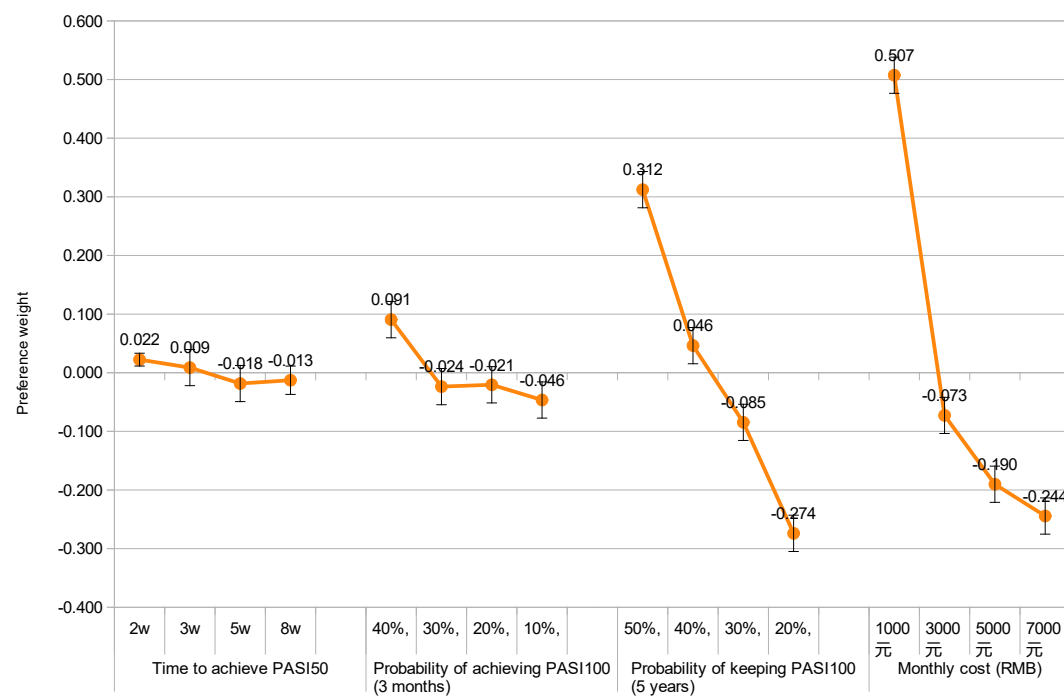
Supplementary Figure 3. Preference weights for attribute levels in Legs or hips subgroup. Preference weights are showed on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



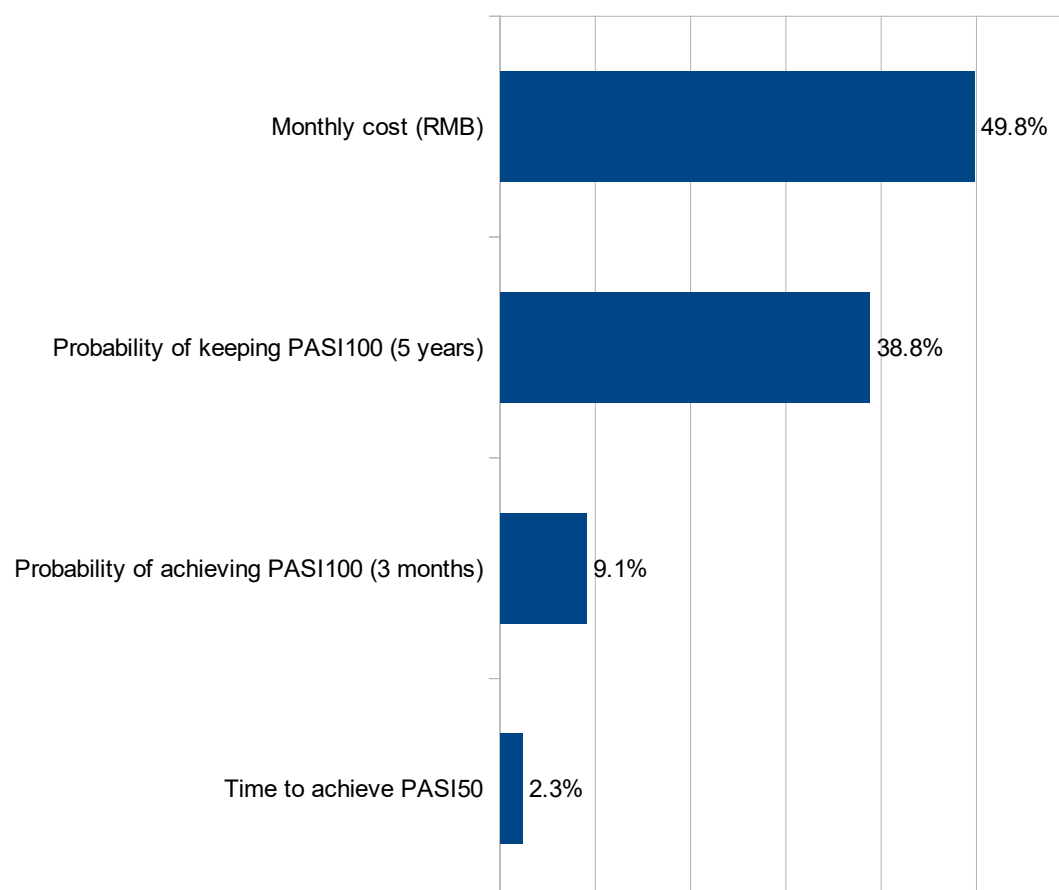
Supplementary Figure 4. Relative importance of attributes in Legs or hips subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Buttock subgroup (n=89)

Preference weights derived from the attribute levels showed that the Buttocks subgroup favored the lower cost of biologic treatments, the probability of keeping PASI100 at 5-years, the probability of achieving PASI100 at 3 months and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment (Figure 5). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 0.75, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.59, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.14, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.04, respectively. Across this subgroup (Figure 6), the attribute regarded as the most important was the monthly cost (RI: 49.8%), probability of keeping PASI100 at 5-years (RI: 38.8%), probability of achieving PASI100 at 3 months (RI: 9.1%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 2.3%), respectively.



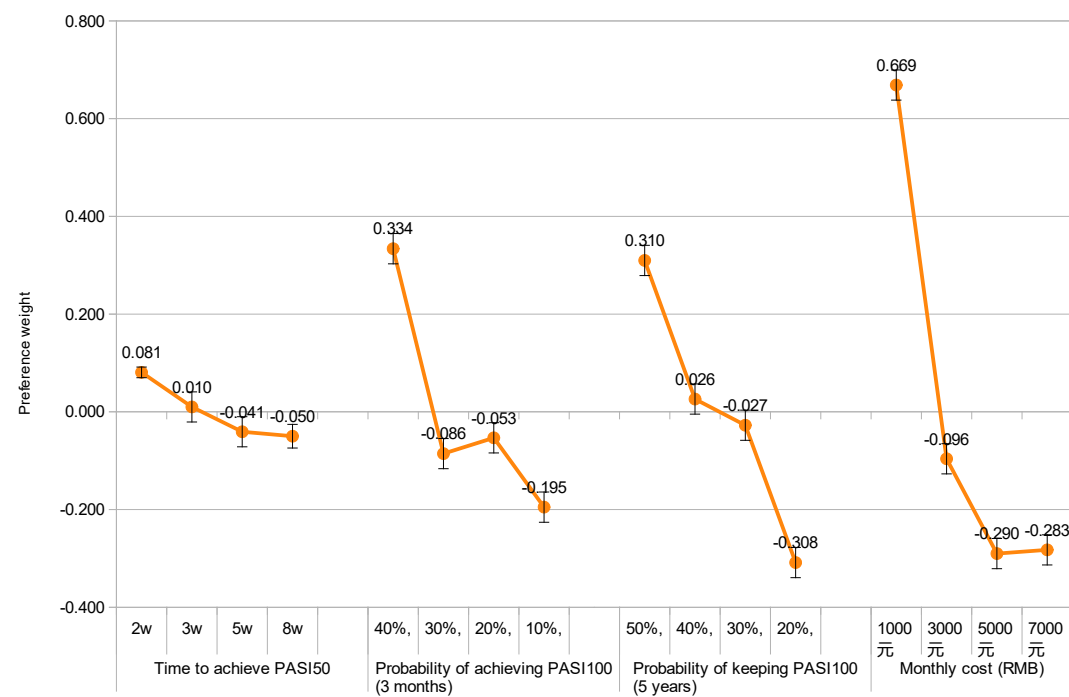
Supplementary Figure 5. Preference weights for attribute levels in Buttock subgroup. Preference weights are shown on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



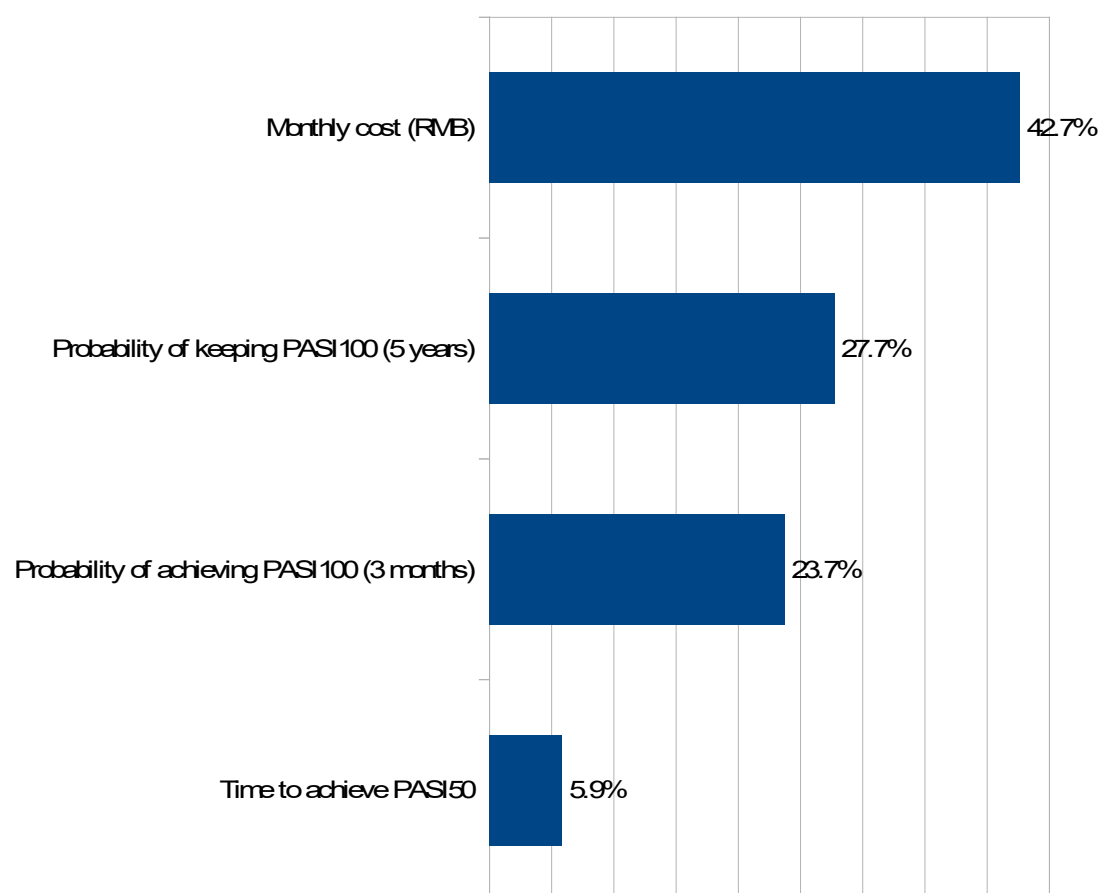
Supplementary Figure 6. Relative importance of attributes in Buttock subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Groin or genital area subgroup (n=46)

Preference weights derived from the attribute levels showed that the Groin or genital area subgroup favored the lower cost of biologic treatments, the probability of keeping PASI100 at 5-years, the probability of achieving PASI100 at 3 months and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment (Figure 7). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 0.95, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.62, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.53, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.13, respectively. Across this subgroup (Figure 8), the attribute regarded as the most important was the monthly cost (RI: 42.7%), probability of keeping PASI100 at 5-years (RI: 27.7%), probability of achieving PASI100 at 3 months (RI: 23.7%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 5.9%), respectively.



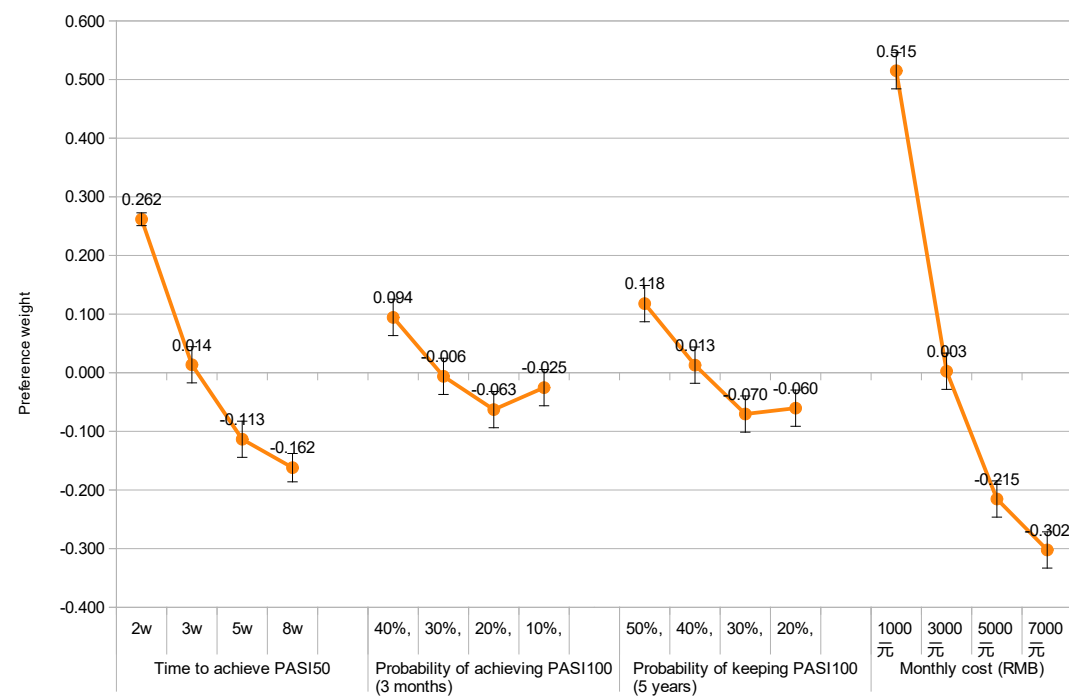
Supplementary Figure 7. Preference weights for attribute levels in Groin or genital area subgroup. Preference weights are showed on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



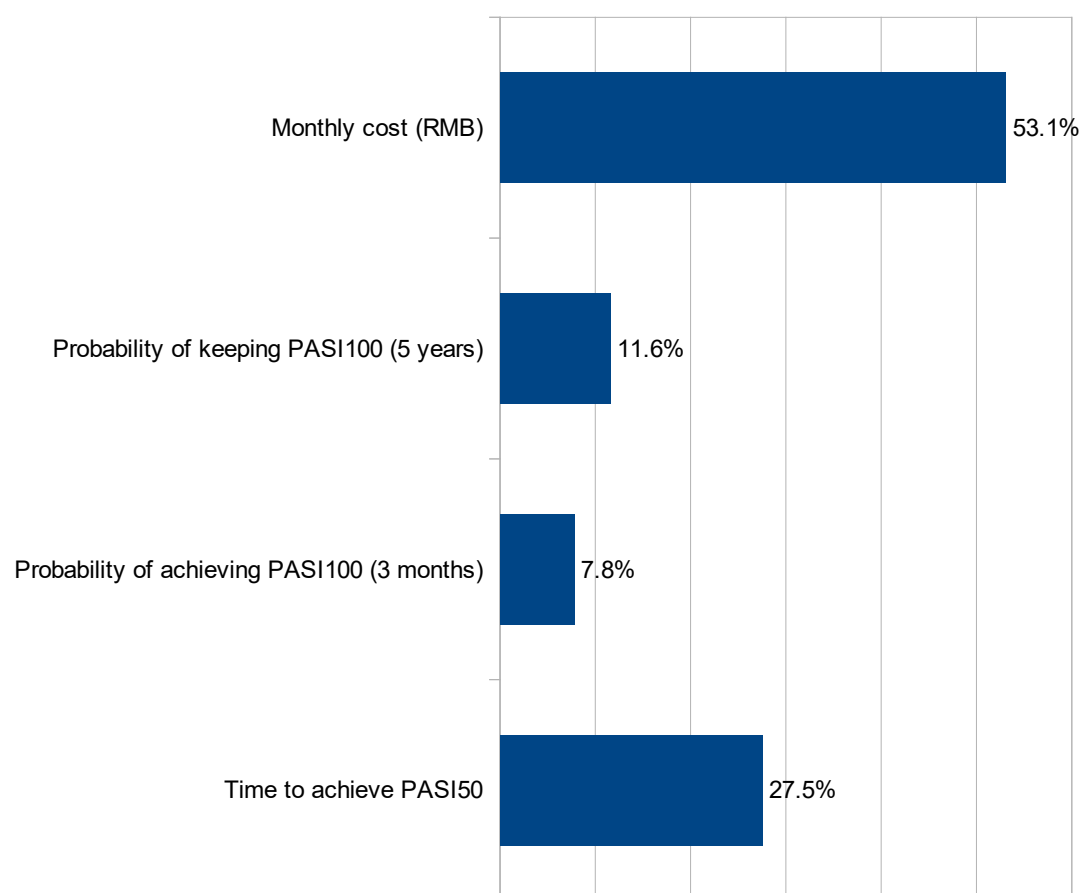
Supplementary Figure 8. Relative importance of attributes in Groin or genital area subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Stomach, chest, or back subgroup (n=118)

Preference weights derived from the attribute levels showed that the Stomach, chest, or back subgroup favored the lower cost of biologic treatments, the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment, the probability of keeping PASI100 at 5-years and the probability of achieving PASI100 at 3 months (Figure 9). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 0.82, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.18, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.12, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.42, respectively. Across this subgroup (Figure 10), the attribute regarded as the most important was the monthly cost (RI: 53.1%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 27.5%), probability of keeping PASI100 at 5-years (RI: 11.6%), probability of achieving PASI100 at 3 months (RI: 7.8%), respectively.



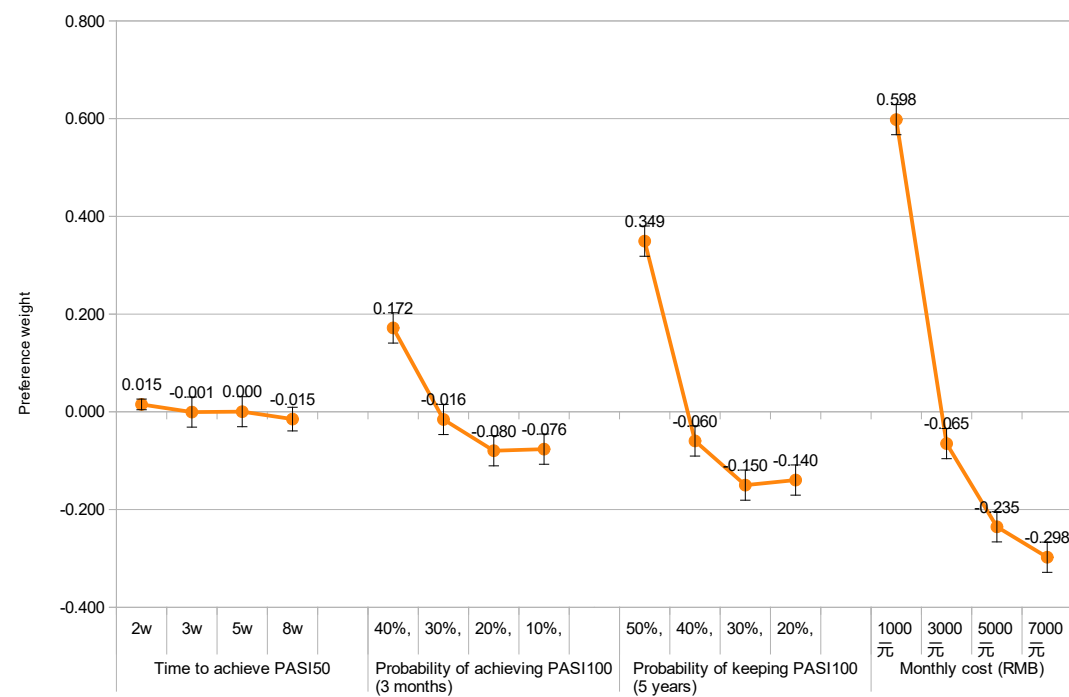
Supplementary Figure 9. Preference weights for attribute levels in the Stomach, chest, or back subgroup. Preference weights are shown on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



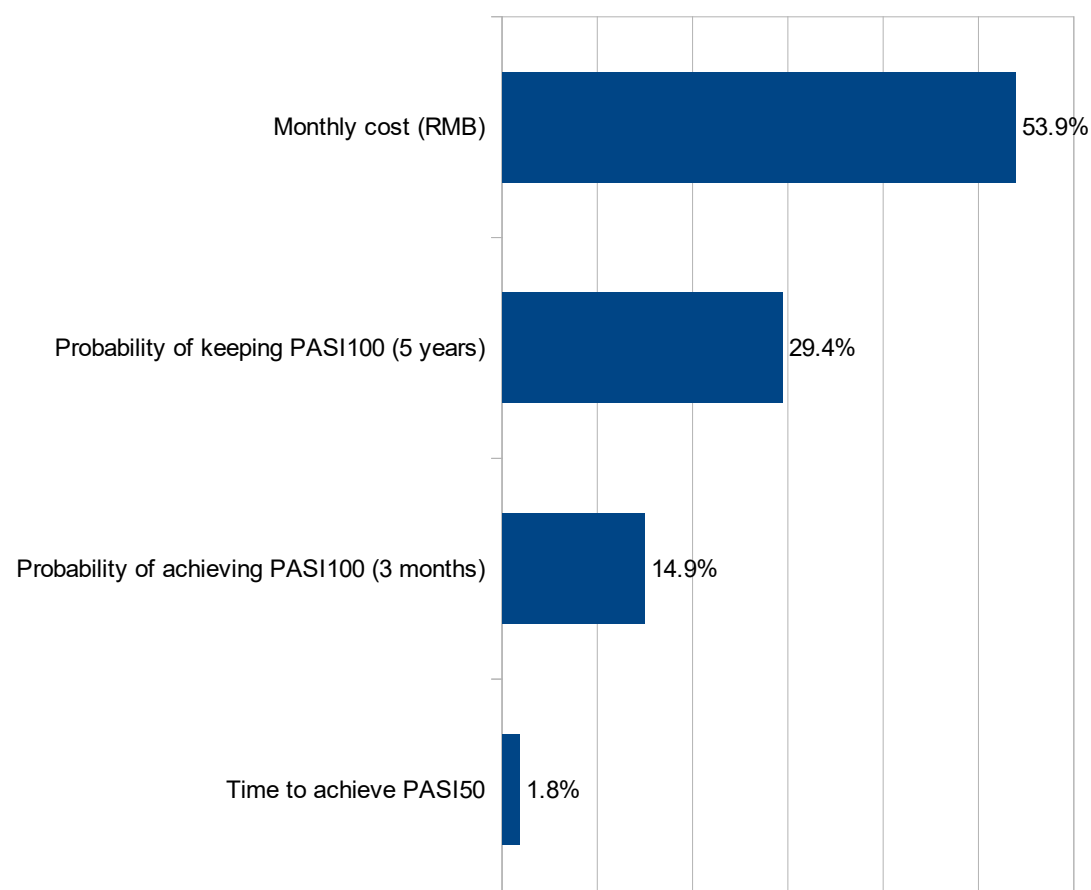
Supplementary Figure 10. Relative importance of attributes in the Stomach, chest, or back subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Arms subgroup (n=115)

Preference weights derived from the attribute levels showed that the Arms subgroup favored the lower cost of biologic treatments, the probability of keeping PASI100 at 5-years, the probability of achieving PASI100 at 3 months and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment (Figure 11). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 0.90, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.49, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.25, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.03, respectively. Across this subgroup (Figure 12), the attribute regarded as the most important was the monthly cost (RI: 53.9%), probability of keeping PASI100 at 5-years (RI: 29.4%), probability of achieving PASI100 at 3 months (RI: 14.9%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 1.8%), respectively.



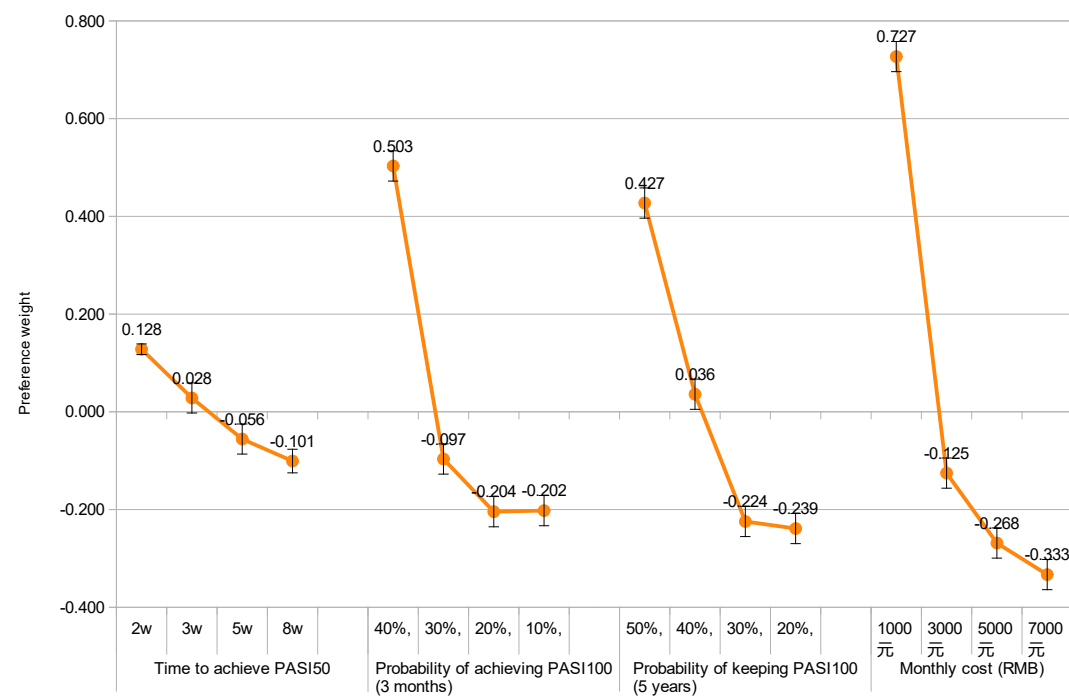
Supplementary Figure 11. Preference weights for attribute levels in Arms subgroup. Preference weights are showed on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



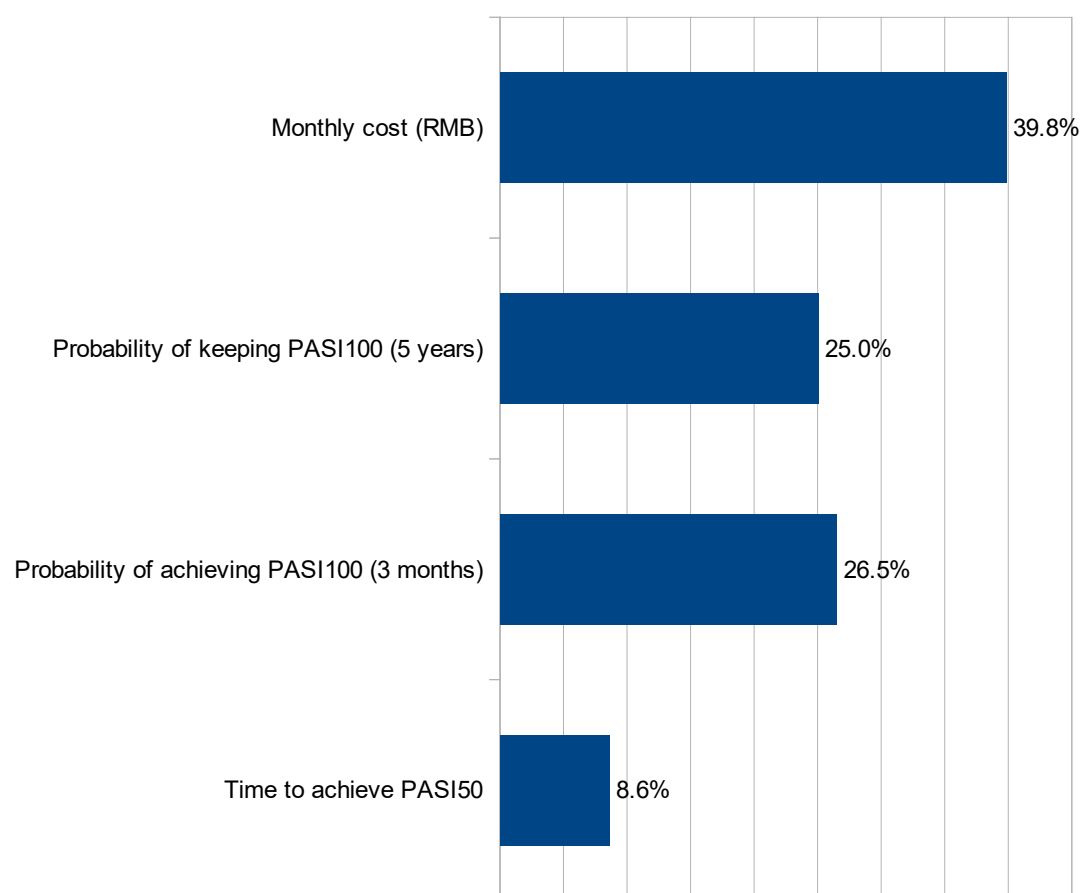
Supplementary Figure 12. Relative importance of attributes in Arms subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Fingers or hands subgroup (n=39)

Preference weights derived from the attribute levels showed that the Fingers or hands subgroup favored the lower cost of biologic treatments, the probability of achieving PASI100 at 3 months, the probability of keeping PASI100 at 5-years and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment (Figure 13). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 1.06, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.67, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.71, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.23, respectively. Across this subgroup (Figure 14), the attribute regarded as the most important was the monthly cost (RI: 39.8%), probability of achieving PASI100 at 3 months (RI: 26.5%), probability of keeping PASI100 at 5-years (RI: 25.0%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 8.6%), respectively.



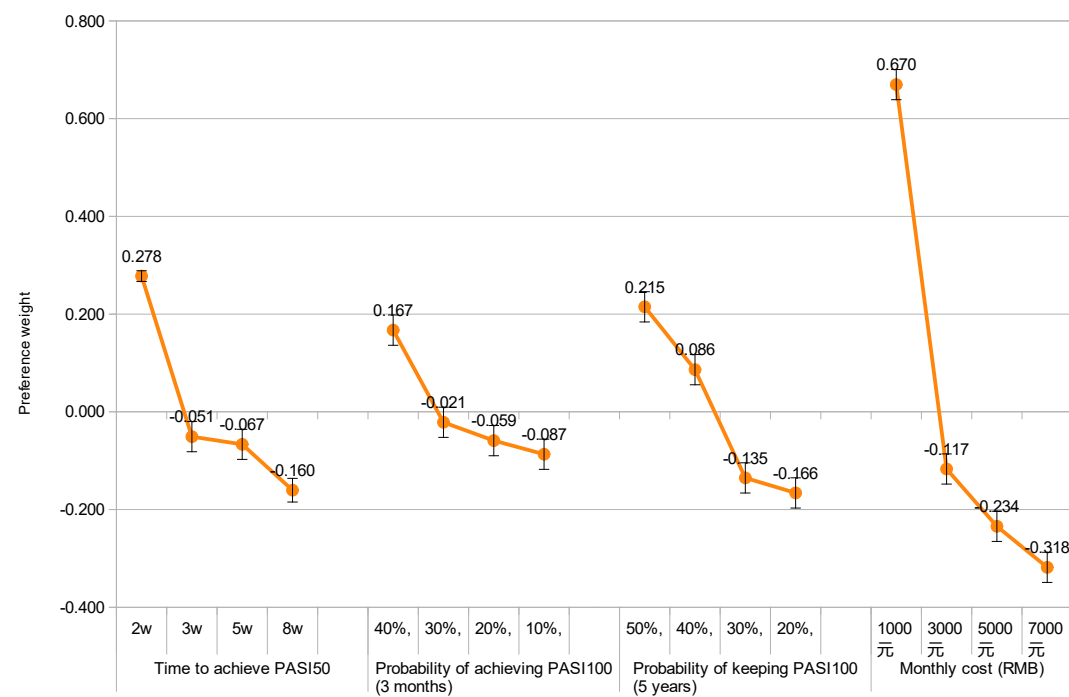
Supplementary Figure 13. Preference weights for attribute levels in Fingers or hands subgroup. Preference weights are shown on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



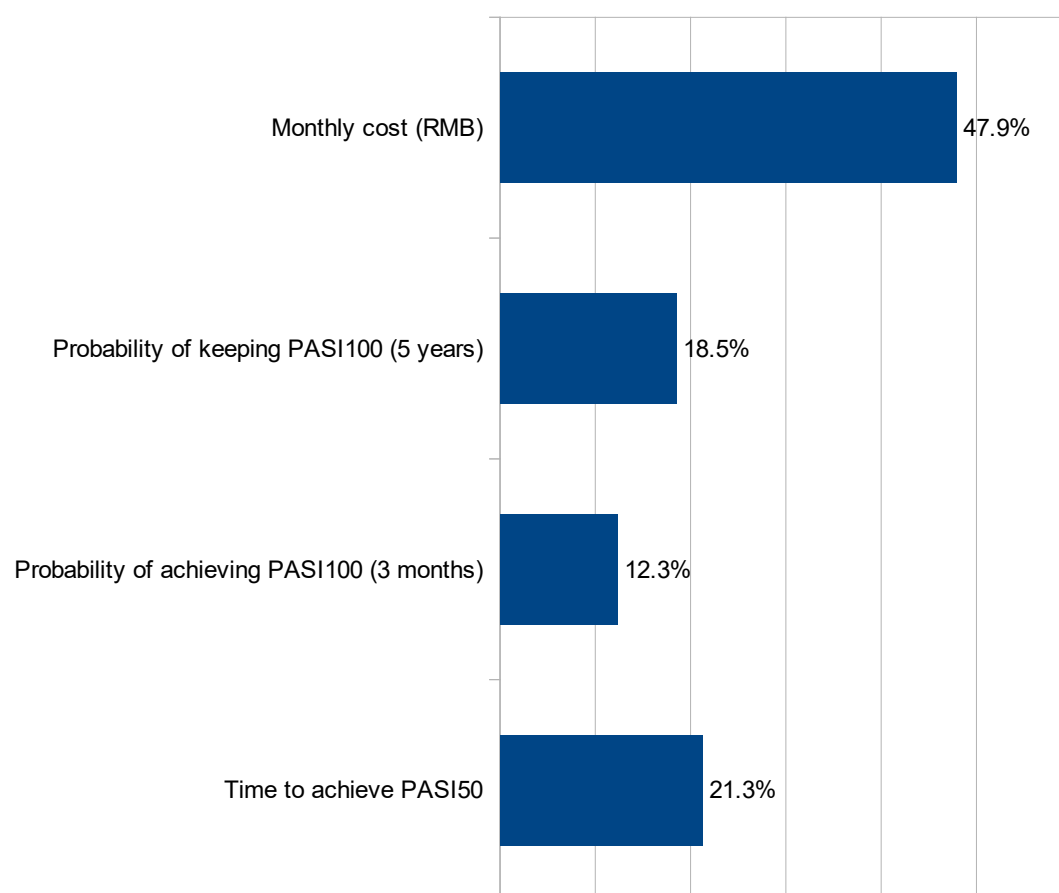
Supplementary Figure 14. Relative importance of attributes in Fingers or hands subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Nail subgroup (n=45)

Preference weights derived from the attribute levels showed that the Nail subgroup favored the lower cost of biologic treatments, the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment, the probability of keeping PASI100 at 5-years and the probability of achieving PASI100 at 3 months (Figure 15). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 0.99, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.38, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.25, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.44, respectively. Across this subgroup (Figure 16), the attribute regarded as the most important was the monthly cost (RI: 47.9%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 21.3%), probability of keeping PASI100 at 5-years (RI: 18.5%), probability of achieving PASI100 at 3 months (RI: 12.3%), respectively.



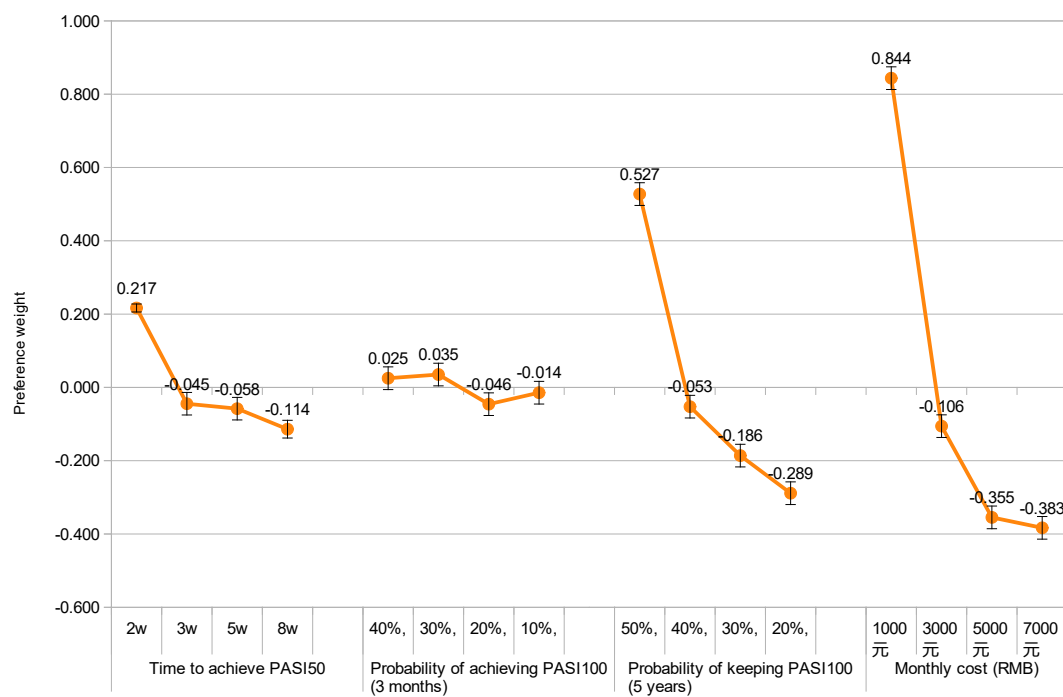
Supplementary Figure 15. Preference weights for attribute levels in Nail subgroup. Preference weights are showed on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



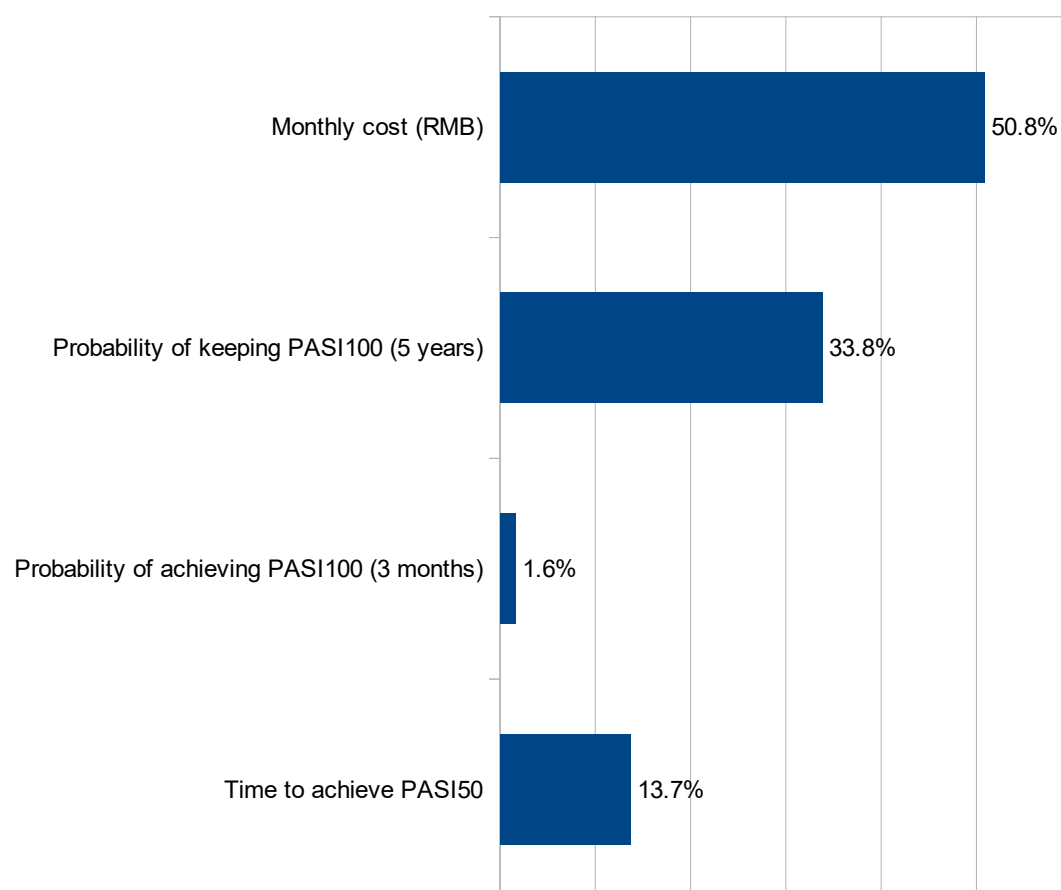
Supplementary Figure 16. Relative importance of attributes in Nail subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Neck subgroup (n=39)

Preference weights derived from the attribute levels showed that the Neck subgroup favored the lower cost of biologic treatments, the probability of keeping PASI100 at 5-years, the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment and the probability of achieving PASI100 at 3 months (Figure 17). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 1.23, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.82, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.04, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.33, respectively. Across this subgroup (Figure 18), the attribute regarded as the most important was the monthly cost (RI: 50.8%), probability of keeping PASI100 at 5-years (RI: 33.8%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 13.7%), probability of achieving PASI100 at 3 months (RI: 1.6%), respectively.



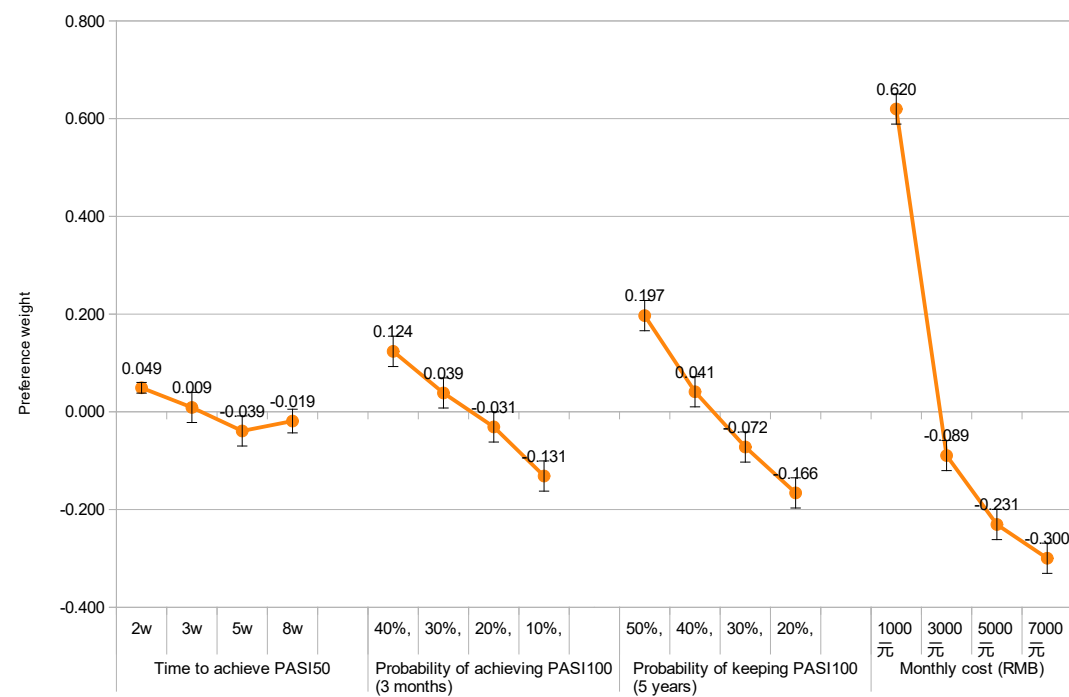
Supplementary Figure 17. Preference weights for attribute levels in Neck subgroup. Preference weights are showed on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



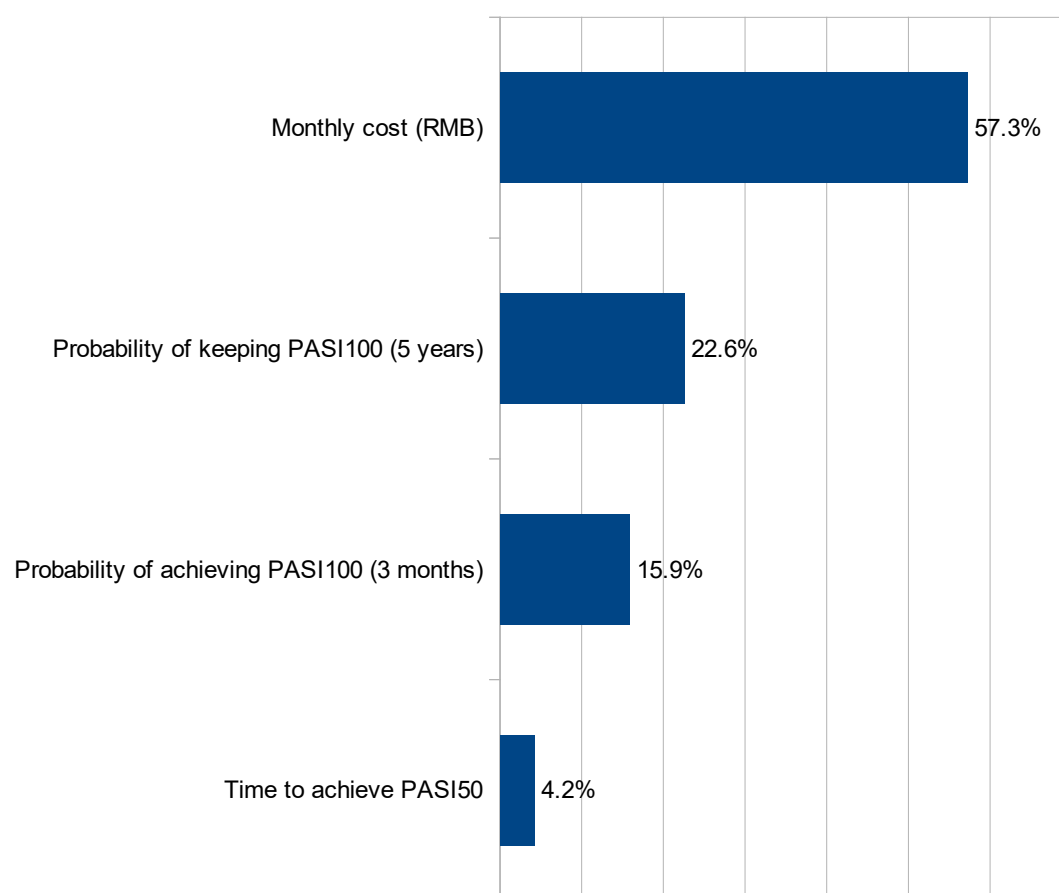
Supplementary Figure 18. Relative importance of attributes in Neck subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Face or ears subgroup (n=82)

Preference weights derived from the attribute levels showed that the Face or ears subgroup favored the lower cost of biologic treatments, the probability of keeping PASI100 at 5-years, the probability of achieving PASI100 at 3 months and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment (Figure 19). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 0.92, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.36, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.26, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.07, respectively. Across this subgroup (Figure 20), the attribute regarded as the most important was the monthly cost (RI: 57.3%), probability of keeping PASI100 at 5-years (RI: 22.6%), probability of achieving PASI100 at 3 months (RI: 15.9%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 4.2%), respectively.



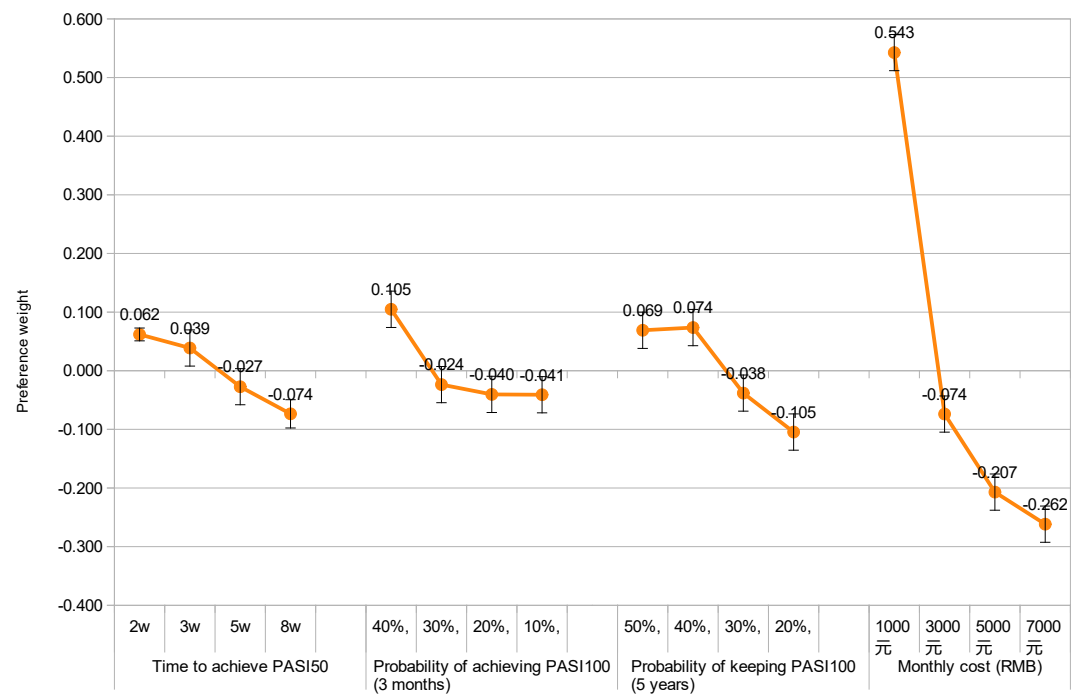
Supplementary Figure 19. Preference weights for attribute levels in Face or ears subgroup. Preference weights are showed on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



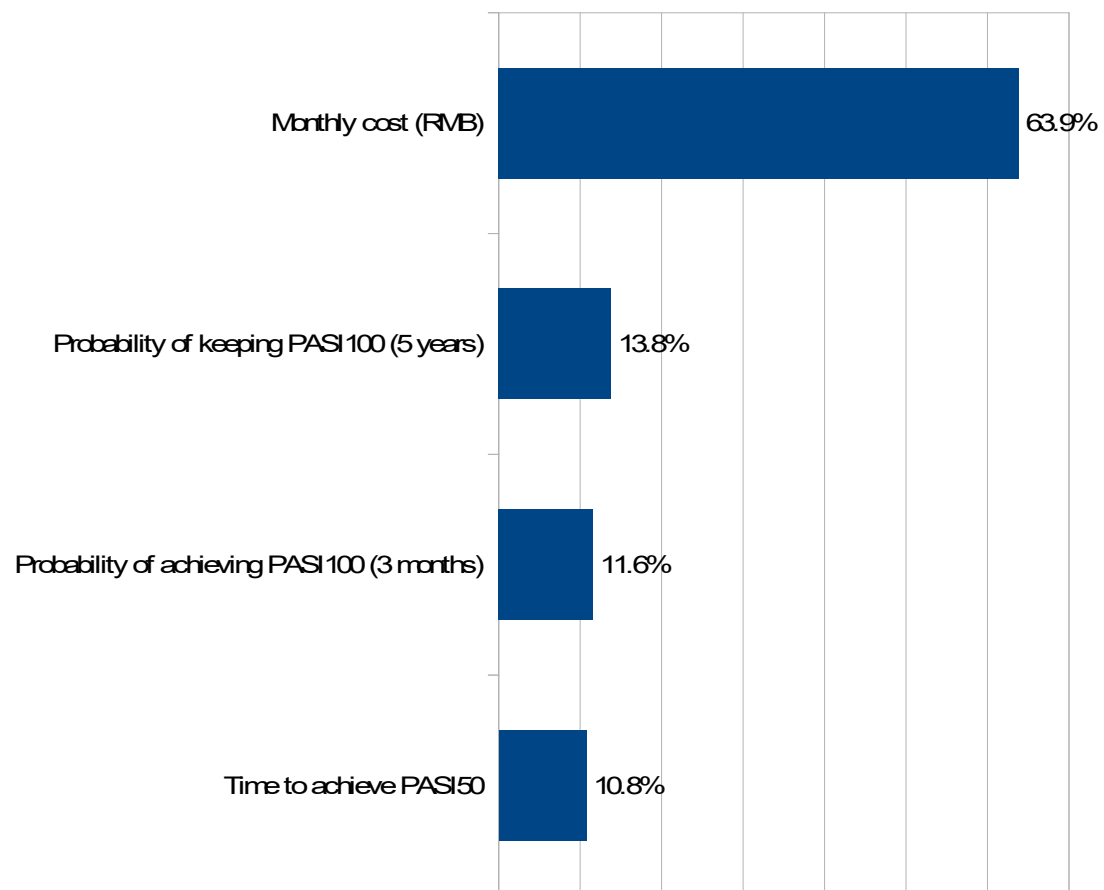
Supplementary Figure 20. Relative importance of attributes in Face or ears subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Scalp subgroup (n=133)

Preference weights derived from the attribute levels showed that the Scalp subgroup favored the lower cost of biologic treatments, the probability of keeping PASI100 at 5-years, the probability of achieving PASI100 at 3 months and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment (Figure 21). The distance score of the reduction of monthly costs from RMB ¥ 7000 to 1000 is 0.80, whereas improvements from 20% to 50% in the probability of keeping PASI 100 at 5-years is 0.17, the improvements from 10% to 40% in the probability of achieving PASI100 at 3 months is 0.15, and the improvements from 8 weeks to 2 weeks in the time to achieve PASI50 after initiation the biologic treatment is 0.14, respectively. Across this subgroup (Figure 22), the attribute regarded as the most important was the monthly cost (RI: 63.9%), probability of keeping PASI100 at 5-years (RI: 13.8%), probability of achieving PASI100 at 3 months (RI: 11.6%), and the time to achieve PASI50 after initiation the biologic treatment (RI: 10.8%), respectively.



Supplementary Figure 21. Preference weights for attribute levels in Scalp subgroup. Preference weights are showed on the vertical scale, describing how much each level was selected within one attribute. Non-overlapping error bars indicate statistically significant differences across levels within attributes.



Supplementary Figure 22. Relative importance of attributes in Scalp subgroup. Relative importance is relatively described values calculated by the distance between the highest and the lowest attribute levels.

Supplementary materials: The analysis results of preference by using conditional logit model in the entire cohort.

Supplementary Table 1. The analysis results of preference by using conditional logit model in the entire cohort.

	Estimate	Std. Error	z-value	Pr (> z)
constant	0.15285	0.05773	2.64774	0.00810
Time to achieve PASI50: 3w	0.02545	0.04542	0.56027	0.57529
Time to achieve PASI50: 5w	-0.01269	0.04534	-0.27976	0.77966
Time to achieve PASI50: 8w	-0.05720	0.04542	0.37057	0.71096
Probability of achieving PASI100 (3 months): 30%,	-0.04785	0.04535	-1.05500	0.29143
Probability of achieving PASI100 (3 months): 20%,	-0.05901	0.04536	-1.30088	0.19330
Probability of achieving PASI100 (3 months): 10%,	-0.05719	0.04538	-1.26008	0.20764
Probability of keeping PASI100 (5 years): 40%,	0.00280	0.04534	1.79753	0.07225
Probability of keeping PASI100 (5 years): 30%,	-0.00280	0.04544	-0.06162	0.95086
Probability of keeping PASI100 (5 years): 20%,	-0.08170	0.04536	-1.80128	0.07166
Monthly cost (RMB): ¥ 3000	-0.05019	0.04542	-1.10491	0.26920
Monthly cost (RMB): ¥ 5000	-0.18570	0.04536	-4.09374	0.00004
Monthly cost (RMB): ¥ 7000	-0.23760	0.04539	-5.23485	0.00000

PASI 50: 50% reduction in the Psoriasis Area and Severity Index score; PASI 100: 100% reduction in the Psoriasis Area and Severity Index score; RMB: China's currency.