







erating is to transfer the original data into comparability sequences. Lost was considered a cost attribute, and Wins, IP, and Outs were benefit attributes. Second, we ran a grey relational coefficient calculation. Lastly, we used a relational grade calculation. In this case, the importance of all performance attributes was weighted differently. The weights of the four performance attributes were 0.3, .16, .26 and .29. The grey relational grade can be calculated as shown in Column 2 of Table 3.

Table 3 The results of grey relational analysis

Player	Grey Relational Grade	Ranking
A1	0.784	2
A2	0.895	1
A3	0.441	4
A4	0.414	8
A5	0.429	7
A6	0.370	15
A7	0.385	12
A8	0.438	5
A9	0.377	14
A10	0.430	6
A11	0.388	11
A12	0.411	9
A13	0.452	3
A14	0.408	10
A15	0.382	13

#### 4. Conclusion

The evaluation of the performance of starting pitchers is a difficult problem that can be classified as a type of MCDM problem for managers or coaches of professional baseball teams. This study first applied the AHP to calculate criterion weights to determine who will be the best performing starting pitcher. GRA was then used to calculate the performance of each starting pitcher candidate with respect to each criterion. Finally, the AHP and GRA were used to calculate the ranks of all starting pitchers for a team in CPBL. At the end of a baseball season, this methodology can be used to provide team managers and coaches with a thorough

understanding of the performance of starting pitchers in their team.

#### 5. References

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