**Supplementary Table S1.** Summary of the endoscopic group

| Case No. | Sex/age (yr) | Laterality | Mechanism of injury | Defect size (mm × mm) | Operation time (min) | Combined nasal bone fracture | Preoperative findings | Postoperative findings | Postoperative pain score (NRS) | Enophthalmos correction rate | Follow-up (day) |
|----------|--------------|------------|---------------------|-----------------------|----------------------|-----------------------------|----------------------|----------------------|-----------------------------|-----------------------------|-----------------|
| 1        | M/39         | Right      | Violence            | 14 × 15               | 19                   | -                           |                      |                      | 2.75                       | 0.5                         | 266             |
| 2        | M/45         | Left       | TA                  | 17 × 12               | 28                   | +                           |                      |                      | 2                          | 0                           | 259             |
| 3        | M/29         | Left       | TA                  | 16 × 16               | 106                  | -                           |                      |                      | 3.3                        | 1                           | 244             |
| 4        | M/65         | Left       | TA                  | 21 × 17               | 47                   | -                           | D, R                 | D                    | 2                          | 1                           | 482             |
| 5        | M/51         | Right      | Violence            | 30 × 16               | 22                   | -                           | E                    |                      | 3.6                        | 2                           | 252             |
| 6        | M/62         | Right      | Violence            | 23 × 11               | 50                   | +                           |                      |                      | 3.3                        | 1                           | 331             |
| 7        | M/27         | Right      | Violence            | 22 × 18               | 68                   | +                           |                      |                      | 2.4                        | 0                           | 356             |
| 8        | M/7          | Right      | Sports              | 15 × 10               | 30                   | -                           | E                    |                      | 1                          | 2                           | 433             |
| 9        | M/26         | Right      | TA                  | 25 × 12               | 135                  | +                           |                      |                      | 2                          | 0                           | 416             |
| 10       | M/12         | Right      | Sports              | 16 × 10               | 46                   | -                           |                      |                      | 0.7                        | 0.5                         | 242             |
| 11       | M/52         | Right      | Violence            | 25 × 17               | 83                   | -                           |                      |                      | 3.25                       | 1                           | 441             |
| 12       | F/25         | Left       | Violence            | 22 × 13               | 32                   | -                           |                      |                      | 4.25                       | 0                           | 350             |
| 13       | M/22         | Right      | Violence            | 18 × 11               | 52                   | +                           | D, R                 |                      | 4                          | 0                           | 193             |
| 14       | M/50         | Right      | Sports              | 24 × 20               | 67                   | +                           |                      |                      | 1.5                        | 0                           | 215             |
| 15       | M/32         | Left       | Violence            | 20 × 9                | 40                   | +                           |                      |                      | 2.25                       | 0                           | 377             |
| 16       | F/53         | Right      | Others              | 20 × 13               | 21                   | -                           |                      |                      | 3.7                        | 0                           | 211             |
| 17       | M/57         | Right      | Others              | 16 × 12               | 30                   | +                           |                      |                      | 2.5                        | 0                           | 220             |
| 18       | M/44         | Left       | Violence            | 14 × 6                | 37                   | -                           |                      |                      | 1                          | 0                           | 184             |
| 19       | F/76         | Right      | Sports              | 16 × 15               | 24                   | +                           | D, R                 |                      | 1.7                        | 0                           | 194             |
| 20       | F/29         | Left       | Sports              | 22 × 16               | 29                   | -                           |                      |                      | 4                          | 0                           | 181             |
| 21       | M/72         | Right      | Fall down           | 17 × 11               | 25                   | -                           |                      |                      | 2.8                        | 0                           | 189             |
| 22       | M/56         | Right      | Fall down           | 14 × 16               | 31                   | -                           |                      |                      | 0.7                        | 0                           | 207             |
| 23       | M/53         | Left       | Others              | 22 × 10               | 33                   | -                           |                      |                      | 3.75                       | 0                           | 184             |
| 24       | F/64         | Left       | Fall down           | 20 × 13               | 39                   | -                           |                      |                      | 3                          | 0                           | 189             |
| 25       | M/46         | Left       | Violence            | 25 × 12               | 25                   | +                           |                      |                      | 4.25                       | 0                           | 190             |
| 26       | M/66         | Left       | Fall down           | 22 × 11               | 44                   | +                           |                      |                      | 3.8                        | -0.5                         | 195             |

M, male; F, female; TA, traffic accident; D, diplopia; E, enophthalmos; R, restriction of eye movement; NRS, numeric rating scale.