### Supplementary Table 2. Patients’ demographics and clinical features in salvage surgery

| Patients’ case No. | Age (yr) | Sex | No. of RT | Dose of RT (cGy) | Initial NSF viability | Postoperative mucosal status | Salvage operation | Interval to salvage operation (mo) | Pre-salvage operation features | Improvement of features | Final mucosal status | ICA rupture | Survival | Follow-up period (mo) |
|--------------------|----------|-----|-----------|------------------|-----------------------|--------------------------|-----------------|----------------------------------|--------------------------------|--------------------------|---------------------|-------------|----------|---------------------|
| 1                  | 47       | F   | 3         | 19,650           | No                    | NA                       | NSF             | 7                               | Yes                            | Yes                      | No                  | Necrosis   | No       | Alive               | 64                |
| 2                  | 51       | M   | 1         | 7,000            | No                    | NA                       | NSF             | 26                              | No                             | Yes                      | No                  | NA         | Improved            | Alive            | 30                |
| 3                  | 52       | M   | 2         | 12,840           | No                    | NA                       | NSF             | 7                               | No                             | Yes                      | No                  | NA         | Improved            | Complete         | 46                |
| 4                  | 54       | M   | 4         | 21,600           | No                    | NA                       | ALFF (maxillary swing) | 2                               | Yes                            | No                      | No                  | NA         | Improved            | Complete         | 58                |
| 5                  | 66       | M   | 4         | 21,840           | No                    | NA                       | ALFF (maxillary swing) | 39                              | Yes                            | No                      | No                  | NA         | Improved            | Complete         | 85                |
| 6                  | 69       | M   | 1         | 6,840            | No                    | NA                       | NSF             | 1                               | Yes                            | Yes                      | No                  | NA         | Improved            | Complete         | 37                |
| 21                 | 70       | M   | 2         | 12,600           | Yes                   | NSF-U                    | ALFF (maxillary swing) | 5                               | No                             | Yes                      | No                  | NA         | Improved            | Complete         | 8                 |
| 23                 | 59       | F   | 2         | 12,200           | Yes                   | NSF-U                    | Partial          | ALFF (transcervical)            | 6                              | No                      | Yes                 | NA         | Improved            | Improved         | 26                |
| 24                 | 70       | M   | 1         | 6,560            | Yes                   | NSF-U                    | Partial          | NSF                             | 1                              | Yes                     | Yes                 | NA         | Improved            | Complete         | 36                |
| 25                 | 72       | M   | 1         | 6,600            | Yes                   | NSF-U                    | Partial          | IT graft, MTF                   | 1                              | No                      | Yes                 | NA         | Improved            | Complete         | 54                |

RT, radiation therapy; NSF, nasoseptal flap; CNP, cranial nerve palsy; ICA, internal carotid artery; NA, not applicable; ALFF, anterolateral thigh free flap; NSF-U, nasoseptal flap necrotic or uncovered subgroup; IT, inferior turbinate; MTF, middle turbinate flap.