local radiation, and TLR3/CD40 stimulation cooperated to decrease PMN-MDSCs, and this reduction required dual TLR3/CD40 stimulation after Flt3L and local radiation. ISIM increased the expression of interferon regulatory factor-8 (IRF8) in PMN-MDSCs, indicating the potential role of IRF8 in decreasing PMN-MDSCs. ISIM decreased the frequency of the CX3CR1⁺ subset of M-MDSCs, potentially decreasing the development of immunosuppressive tumor-associated macrophages. ISIM upregulated PD-L1 expression in both M-MDSCs and PMN-MDSCs, suggesting that both MDSCs might play a role in inhibiting T-cell function. Consistent with this notion, anti-PD-L1 therapy enhanced antitumor efficacy of ISIM.

CONCLUSION: ISIM holds potential as an intralesional therapy to alter the myeloid compartment of TNBC and increase responsiveness to anti-PD-L1 therapy.

The Modified 5-Item Frailty Index Is a Risk Predictor in Breast Reconstruction: An Analysis of 40,415 Patients
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INTRODUCTION: The Modified Frailty Index 5 (mFI-5), a concise comorbidity-based scale, has been shown to predict adverse outcomes in various surgical fields. In this study, we sought to evaluate the effectiveness of the mFI-5 in predicting postoperative outcomes after breast reconstruction.

METHODS: There were 40,415 patients who underwent breast reconstruction identified from the 2015-2019 American College of Surgeons, National Surgical Quality Improvement Program (ACS NSQIP) database. Of these, 29,562 were implant-based and 10,853 were autologous. We extracted demographic and comorbidity data and postoperative outcomes including mortality, length of operation and hospital stay, medical and surgical complications, and discharge location.

RESULTS: Increases in the mFI directly correlated with higher rates of reoperation (5.9% mFI0 vs 13.5% mFI≥3; p<0.0001) unplanned readmission (3.6% mFI0 vs 10.8% in mFI≥3; p<0.0001), surgical (5.9% mFI0 vs 16.2% mFI≥3; p<0.0001) and medical (1.3% mFI0 vs 6.8% mFI≥3; p<0.0001) complications, and decreased home discharge (99.5% mFI0 vs 95.9% in mFI≥3; p=0.001). Multivariate analysis verified greater rates of medical and surgical complications with higher mFI scores. Analysis by type of reconstruction, showed that although frailty significantly correlated with complications in both autologous and implant-based reconstruction, the correlation was greater in autologous reconstruction. Stratification by age found that the mFI-5 is particularly effective in predicting risk in younger patients (<60 years old) who are frail.

CONCLUSION: The mFI-5 is a significant postoperative risk predictor in breast reconstruction. Application of the mFI-5 can assist in preoperative identification of frail patients, improving pre- and postoperative planning and support, and optimizing patient outcomes.