**Summary Results**

**Burulinox Study consult**

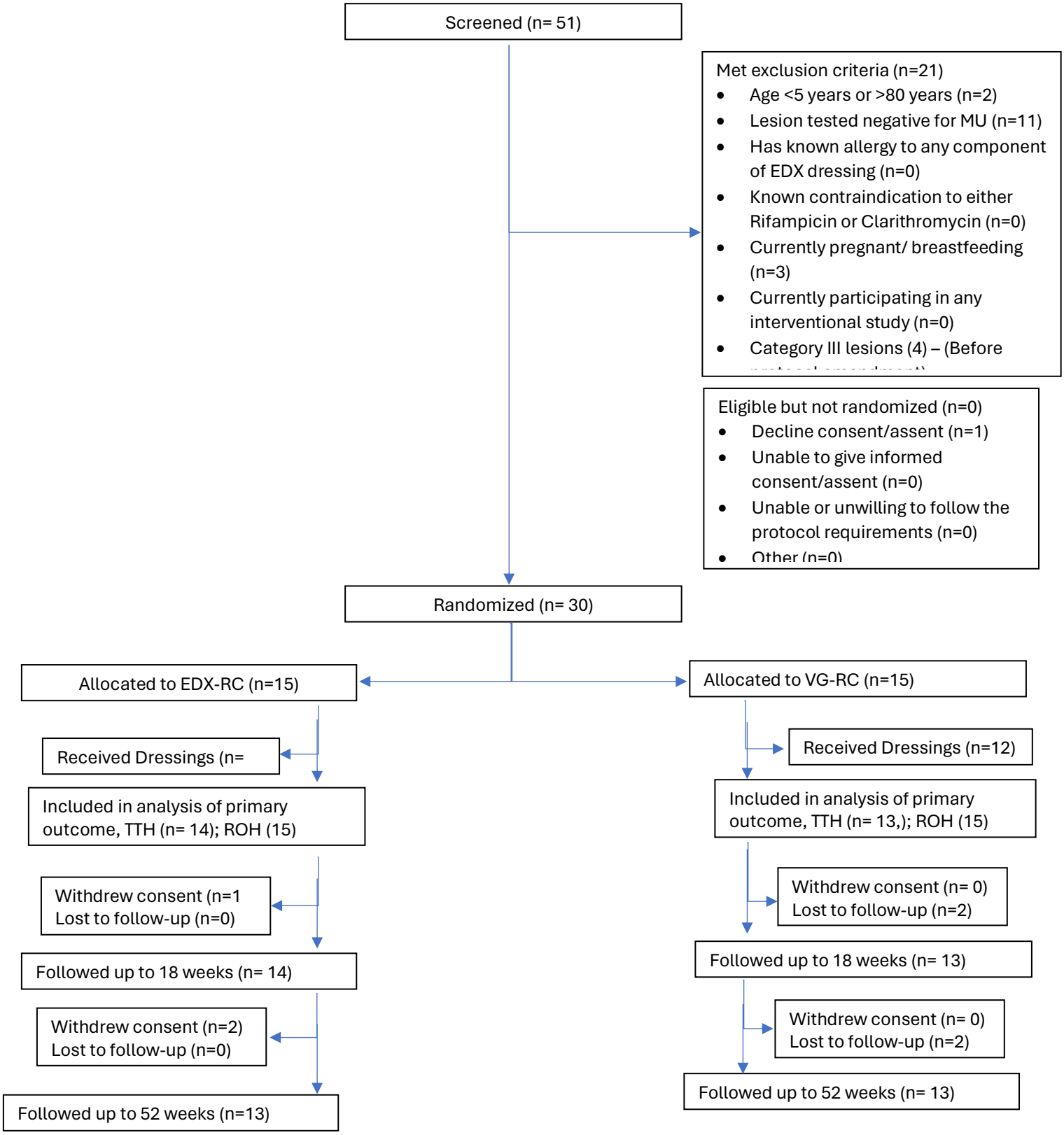


**Figure 1. Flow diagram for study procedures**
*TTH- Time to healing (weeks), ROH- Rate of healing*

A new nitric oxide-generating wound dressing (EDX-110) was evaluated to assess its effectiveness in improving the healing rate for Buruli ulcer patients compared to the standard Vaseline gauze dressing. Between August 2021 and September 2024, 30 eligible participants were randomized to receive either the EDX dressings or the standard Vaseline gauze dressings. Assessments focused on comparing the time to complete healing, healing rates, the rates of killing *M. ulcerans*, and the dressings' tolerability as reported by study participants. All participants received 8 weeks of antibiotic treatment consisting of 10 mg/kg of rifampicin and 15 mg/kg of clarithromycin. Additionally, participants who developed ulcers or presented with ulcers were provided with the wound dressings.

**Participant characteristics**

Table 1 displays the characteristics of the study participants, with 15 randomized in each group. The median (IQR) age was 25.5 (5-62), with a female predominance of 17 (56.7%). The lesions observed were 19 (63.3%) ulcers, followed by 6 (20%) plaques and 5 (16.7%) nodules, while there were no cases of edema or the more complicated form, osteomyelitis. Most lesions were located on the lower limbs 18(60%), followed by those on the upper limbs 10(33.3%) and those on other parts of the body including the head and neck region. Only 3(10%) of the lesions were category III, while the rest were category II 14(46.7%) and category I 13 (43.3%).

**Table 1 Clinical characteristics of study participants.**

| | TREATMENT GROUPS | | |
|---|---|---|---|
| **Characteristics** | **EDX-RC (n=15 (50%))** | **VG-RC (n=15 (50%))** | **All Patients** |
| Age, median years (IQR) | 23 (11-43.7) | 27 (14.5-44.5) | 25.5 (5-62) |
| **Gender, n (%)** | | | |
| Male | 7(46.7) | 6(40) | 13 (43.3) |
| Female | 8(53.3) | 9 (60) | 17 (56.7) |
| **Clinical Forms n (%)** | | | |
| Ulcer | 9(60) | 10(66.7) | 19 (63.3) |
| Nodule | 1(6.7) | 4(26.6) | 5 (16.7) |
| Plaque | 5 (3.3) | 1(6.7) | 6 (20) |
| Oedema | 0 | 0 | 0 |
| **WHO Category, n (%)** | | | |
| I (<=5cm) | 6(36) | 7(50) | 13 (43.3) |
| II (5-15cm) | 6(43) | 8(50) | 14 (46.7) |
| III (>15cm) | 3(21) | 0 | 3 (10) |
| **Location of lesion, n (%)** | | | |
| Lower limb (LL) | 8(57) | 10(63) | 18 (60) |
| Upper limb (UL) | 5(29) | 5(37) | 10(33.3) |
| Other locations | 2(14) | 0 | 2 (6.7) |
| Proportion of participants receiving dressings | 11(73.3) | 12(80) | 23 (76.7) |
| **Healing Outcomes** | | | |
| Time to healing for those receiving dressing | 20(8-32) | 26(19-48) | 24(13-36) |
| Antibiotics only | | | 5(4-11) |
| Overall time to healing | | | 21 (8-32) |

**Comparison of healing outcome for Buruli ulcer patients treated with EDX-110 and Vaseline gauze dressings.**

To evaluate the effect of the two dressings on healing outcomes (the primary endpoint), we compared the time to complete healing and the risk of delayed healing between the two treatment groups.

Figure 2 indicates that the healing time was shorter for participants receiving the EDX-RC treatment compared to those on the VG-RC treatment, although the difference was not significant (p=0.29).

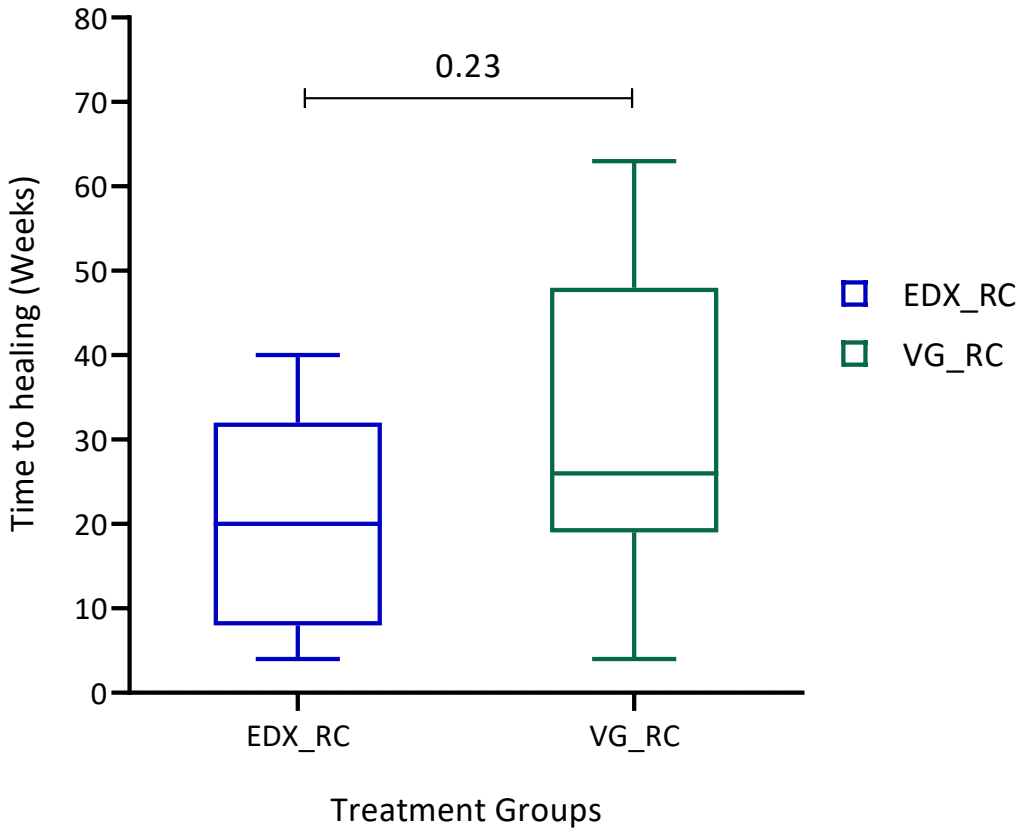
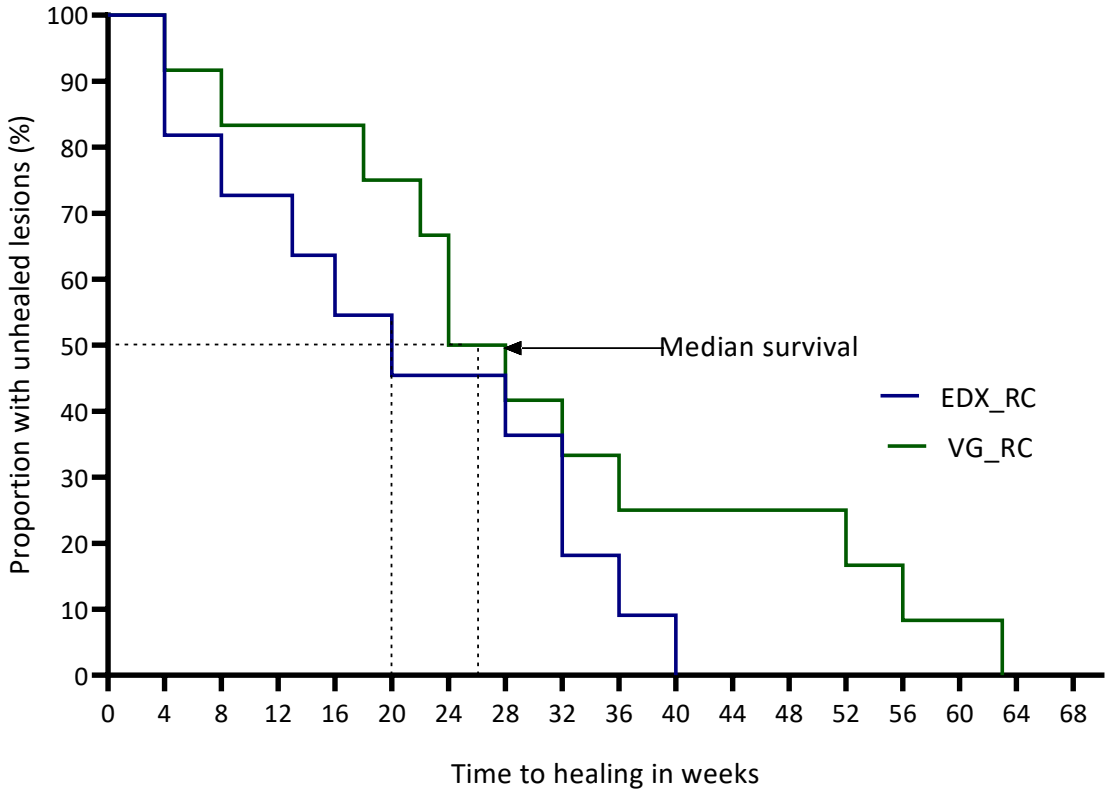



**Figure 2 Comparison of time to healing between treatment groups**

A Kaplan-Meier analysis of time to healing shown in Figure 3 indicates that participants using the Vaseline gauze dressing were 1.6 times more likely to heal slowly than those using the nitric oxide generating dressing, although the difference in risks is not statistically significant (p=0.28).




Number at risk

| | 0 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 56 | 60 | 64 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDX-RC | 11 | 9 | 8 | 8 | 6 | 5 | 5 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VG-RC | 12 | 11 | 10 | 10 | 10 | 9 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 0 |

P=0.28 Log-rank hazard ratio (95%CI) =1.64 (0.6988 to 3.841)

**Figure 3 Kaplan Meier analysis for time to healing, reporting risks of delayed healing in the two treatment groups.**

**Incidence of adverse events**

Adverse events reported included itching following dressing changes, the development of rashes, and paradoxical reactions. Paradoxical reactions are known phenomena associated with treatment. Figure 4 illustrates the incidence of adverse events in the two treatment groups.

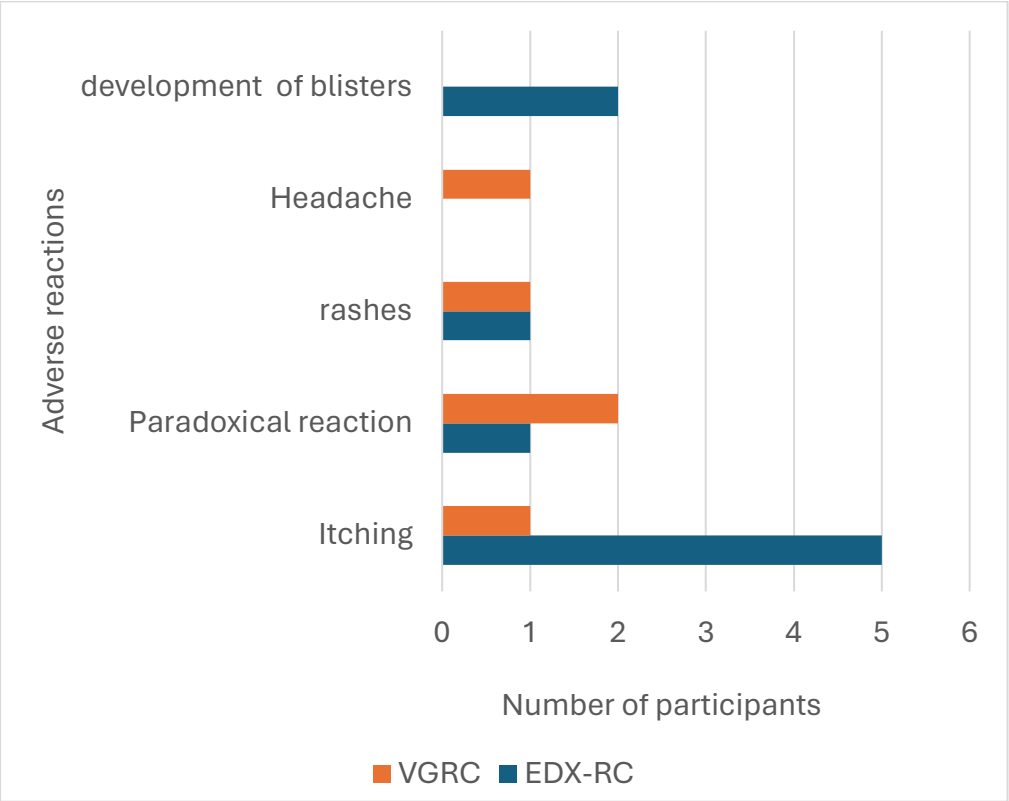



**Figure 4 Incidence of adverse events in the two treatment groups**

**Conclusions**

The outcomes, however, suggest that nitric oxide-generating dressings, when combined with antibiotics, will likely result in a shorter healing time and an increased probability of faster recovery.