**Supplemental Digital Content 2.** Characteristics of 117 pediatric cases with invasive group A streptococcal infections (iGAS) in the two study periods: Jan 2018-Dec 2019 (i.e., 24 months) and July 2021-June 2022 (i.e., 12 months).

|  |
| --- |
|  |
|  | **Jan 2018 - Dec 2019** |  | **July 2021 - June 2022** |
|  | N | N/total | % | N | N/total | % |
| **Total number of iGAS cases** | 56 (2.3 case/month) |  |  | 61 (5.1 case/month) |  |  |
| **Months of observation** | 24 |  |  | 12 |  |  |
| **Age\***  |  |  |  |  |  |  |
| 0-5 years | 21 | 21/42 | 50 | 38 | 38/54 | 70 |
| 5-9 years | 15 | 15/42 | 36 | 12 | 12/54 | 22 |
| ≥10 years | 6 | 6/42 | 14 | 4 | 4/54 | 7 |
| Missing age  | 14 | 14/56 |  | 7 | 7/61 |  |
|  |  |  |  |  |  |  |
| **Diagnosis\*** |  |  |  |  |  |  |
| Necrotizing fascitis | 0 | 0/53 | 0 | 6 | 6/57 | 11 |
| Pneumonia with empyema | 7 | 7/53 | 13 | 16 | 16/57 | 28 |
| Sepsis | 14 | 14/53 | 26 | 10 | 10/57 | 18 |
| STSS | 2 | 2/53 | 4 | 4 | 4/57 | 7 |
| Septic arthritis | 3 | 3/53 | 6 | 5 | 5/57 | 9 |
| Osteomyelitis | 2 | 2/53 | 4 | 2 | 2/57 | 4 |
| Cellulitis | 3 | 3/53 | 6 | 3 | 3/57 | 5 |
| Other | 22 | 22/53 | 42 | 11 | 11/57 | 19 |
| Missing diagnosis | 3 | 3/56 |  | 4 | 4/61 |  |
|  |  |  |  |  |  |  |
| **Outcome\*\*** |  |  |  |  |  |  |
| ICU admission*, total*  | 8 | 8/39 | 21 | 18 | 18/57 | 32 |
| Missing data | 17 | 17/56 |  | 4 | 4/61 |  |
|  |  |  |  |  |  |  |
| *ICU admission by age group* |  |  |  |  |  |  |
| 0-5 years | 6 | 6/8 | 75 | 12 | 12/18 | 67 |
| 5-9 years | 2 | 2/8 | 25 | 1 | 1/18 | 6 |
| ≥10 years | 0 | 0/8 | 0 | 1 | 1/18 | 6 |
|  |  |  |  |  |  |  |
| Death*, total* | 1 | 1/39 | 3 | 5  | 5/57  |  9 |
| Missing data | 17 | 17/56 |  | 4 | 4/61 |  |
|  |  |  |  |  |  |  |
| *Death by age group* |  |  |  |  |  |  |
| 0-5 years | 0 |  |  | 3 | 3/5 | 60 |
| 5-9 years | 1 | 1/1 | 100 | 0 |  | 0 |
| ≥10 years | 0 |  |  | 1 | 1/5 | 20 |
| Unknown | 0 |  |  | 1 | 1/5 | 20 |
|  |  |  |  |  |  |  |  |
| **Prior infection\*\*\*** |  |  |  |  |  |  |  |
| Varicella zoster |  |  | n/a |  | 16 | 16/49 | 33 |
| Influenza |  |  | n/a |  | 9 | 9/49 | 18 |

Age, clinical presentation, and outcome of invasive Group A streptococcal infections in the pediatric cohorts 2018-2019 and 2021-2022.

\* Data available from 6/7 hospitals

\*\* Data available from 5/7 hospitals in 2018-2019 and 6/7 hospitals in 2021-2022

\*\*\* Data available from 5/7 hospitals

Other diagnoses for both periods include: tonsillitis with bacteremia, mastoiditis with bacteremia, cervical lymphadenitis, abscesses at different locations, bacterial tracheitis, meningitis and peritonitis.