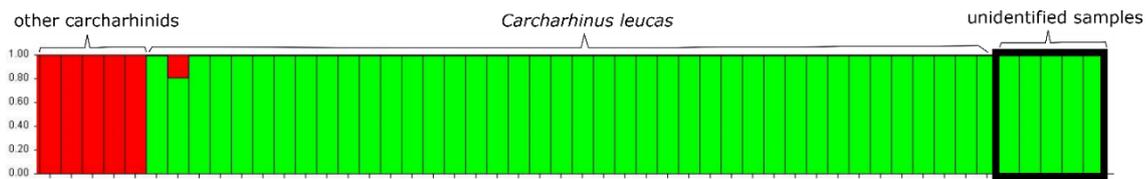


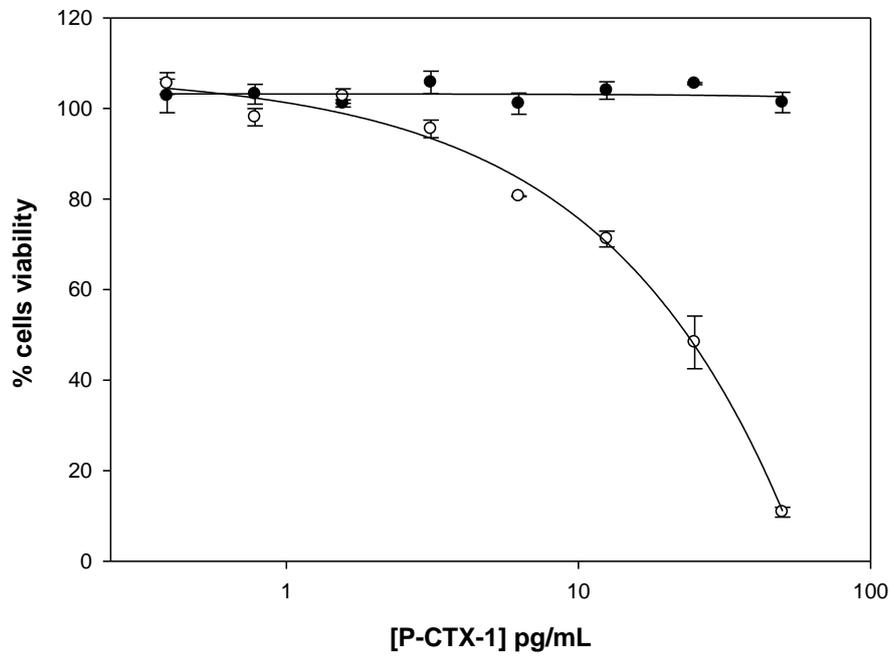
Identification of ciguatoxins in a shark involved in a fatal food poisoning in the Indian Ocean

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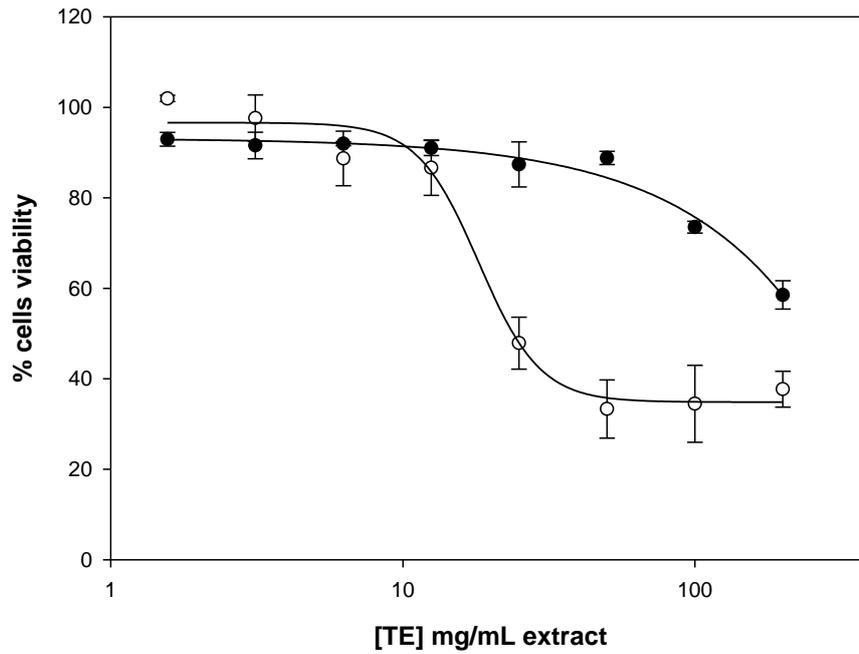
Supplementary Figure S1. Assignment test (STRUCTURE software) for shark species identification. Each bar on the x-axis represents one individual, and the y-axis represents the probability to belong to one or another cluster. The multilocus genotypes of the unidentified shark samples (presumed to be bull shark) were used in assignment with other bull shark individuals²⁶ and other carcharinid species that successfully amplified the loci used (*Carcharinus obscurus* or *C. plumbeus*). Two clusters were found: the red one corresponds to other shark species and the green one corresponds to bull shark individuals. The unidentified samples clustered with the bull shark cluster.



Supplementary Figure S2. Cytotoxicity of P-CTX-1 on Neuro-2a cells with (white dots) and without (black dots) ouabain/veratridine treatment. Error bars represent standard deviation (SD) values for 3 replicates (n=3).



Supplementary Figure S3. Cytotoxicity of fin extract 2 on Neuro-2a cells with (white) and without (black) ouabain/veratridine treatment. In the absence of ouabain/veratridine, a matrix effect leading to cell toxicity was observed at concentrations of 100 mg TE/mL or higher. In the presence of ouabain/veratridine, a CTX-like effect was observed at lower concentrations. (TE: tissue equivalents). Error bars represent standard deviation (SD) values for 3 replicates (n=3).



Supplementary Table S1. Multilocus genotypes of the five samples of shark tissue from Madagascar using 20 loci developed for *Carcharhinus leucas* (CI01 to CI20²⁶), one locus developed for *Galeocerdo cuvier* (Gc01²⁸) and one locus developed for *C. limbatus* (Cli106²⁷). Alleles are in base pairs and the diploid genotypes are expressed with alleles in 3-digit format and concatenated. NA: no amplification.

Sample Name	CI01	CI02	CI03	CI04	CI05	CI06	CI07	CI08	CI09	CI10	CI11
A565_1: flesh	116116	143143	106108	124130	137137	148148	149149	148154	111111	127127	232236
A565_2: stomach	116116	143143	106108	124130	137137	148148	149149	148154	111111	127127	232236
A565_3: fin 1	116116	143143	106108	124130	137137	148148	149149	148154	111111	127127	232236
A565_4: fin 2	116116	143143	106108	124130	137137	148148	149149	148154	111111	127127	232236
A565_5: fin 3	116116	143143	106108	124130	137137	148148	149149	148154	111111	127127	232236

Sample Name	CI12	CI13	CI14	CI15	CI16	CI17	CI18	CI19	CI20	Gc01	Cli106
A565_1: flesh	105105	122124	217217	296296	107109	177177	211211	207215	146155	136136	211211
A565_2: stomach	105105	122124	217217	296296	107109	177177	NA	207215	146155	136136	NA
A565_3: fin 1	105105	122124	217217	296296	107109	177177	NA	207215	146155	136136	NA
A565_4: fin 2	105105	122124	217217	296296	107109	177177	211211	207215	146155	136136	NA
A565_5: fin 3	105105	122124	217217	296296	107109	177177	211211	207215	146155	136136	NA