BOLL. MUS. REG. SCI. NAT. TORINO	Vol. 42 – N. 1-2	REVIEW	doi: 10.4081/bmrsn.2026.87
Submission: 18-6-2026 – Accepted: 29-9-2026			

Francesco Chigi Della Rovere, civic ornithologist and pioneer of conservation, at 90 years from his "La morte delle specie animali" (The death of animal species)

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ABSTRACT

Relatively little has been written about the ornithological and conservation work of Francesco Chigi Della Rovere, a prominent figure in Rome in the first half of the twentieth century. To reevaluate his pioneering work in the field of bird conservation, we remember the 90th anniversary of his valuable, but little-known, contribution to the topic of animal extinction published in his own journal, *Rassegna Faunistica*. Although absolutely preliminary, the present contribution has the merit of placing Chigi in the historical context of the "new ornithology" that emerged in Germany in the 1920s, as well as in the international bird protection movement, which has clearly Anglo-Saxon roots.

Keywords: environmental awareness, extinctions, hunting, Italy, Ornithological Station of Castel Fusano.

In 2025 the Museo Regionale di Scienze Naturali in Turin published a monograph dedicated to biological extinctions (Andreone *et al*., 2025). Despite the prominence of the issue in global policies over the last decades, scientific institutions have rarely put the theme in the spotlight, and Italian museums have celebrated even less frequently the history of staff and collaborators that were part of the pioneering efforts to preserve biodiversity in Italy (Gippoliti & Pedrotti, 2020). On the 90th anniversary of a little-known paper on extinctions by Francesco Chigi (Chigi, 1936), the opportunity to contribute to the history of the protection of nature in the country arose. The topic of extinction and threatened species would reach the general Italian public only in the 1970s (Ziswiler, 1971; Baschieri Salvadori & Florio, 1977; Pratesi, 1978).

Francesco Chigi

Francesco Chigi della Rovere (1881–1953; Fig. 1) (Chigi, 1934) was a member of one of the most important Roman families (Palazzo Chigi in Rome is the official residence of the Prime Minister of Italy) and, although lacking a formal scientific training, he became a young member of the *Società Zoologica Italiana* run by Prof. Antonio Carruccio (1839–1923) as he started writing ornithological notes and papers in 1903. The adjective "civic" added to "ornithologist" in the title is a reference to what has been called the *civic realm of science* by the historian Lynn K. Nyhart, who described it as the "sphere dominated by neither state nor university" (Nyhart, 1998; De Bont, 2009). Chigi's first ornithological phase dealt with species distribution and systematics, a classic theme in those years which he treated with some originality. He also had a scientific debate with Tommaso Salvadori, the famous ornithologist of the Turin Museum, concerning the taxonomy of the *Passer domesticus* (Linnaeus, 1758) complex in Western Europe, with Salvadori supporting species status for *Passer domesticus*, *Passer italiae* (Vieillot, 1817) and *Passer hispaniolensis* (Temminck, 1820) while Chigi acknowledged only one species (Chigi 1904, 1914). As most ornithologists at the time, Chigi was a hunter and bird collector with an exceptionally developed sensitivity toward the scientific role of natural history collections. In Chigi's view, private natural history collections should contribute to the knowledge of a common scientific heritage and "the collector who wants to make his own work effective and useful must at least leave at the disposal of the community of scholars what in a collection represents the scientific heritage, i.e. the notions that can emerge through studying the collected material. And I have the firm belief that any collection, even if developed within modest [geographic] limits, can make its contribution to science when a senseless selfishness does not hold back the owner from making its contents known. This is the concept that determined me to collect, and that has me now pushed to communicate the catalogue of my Roman regional ornithological collection to the Italian Zoological Society" (Chigi 1912: 417, translated by the author; see also Gippoliti & Battisti, 2025). In this phase, Chigi also played a crucial role in the establishment of the *Giardino Zoologico* in Rome and of the journal *Rivista Italiana di Ornitologia* (Gippoliti, 2010). After his death, his collection was donated to the *Museo Civico di Zoologia*, at the time still managed together with the *Giardino Zoologico*, and displayed in a hall dedicated to Chigi himself (Gippoliti, 2023). After the war, Chigi played an important role in establishing the *Unione Italiana Naturalisti* in Rome and in 1946 was among the 24 members of the *Commissione di studio per la*

sistemazione dei parchi nazionali in Italia of the CNR (Consiglio Nazionale delle Ricerche) (Pedrotti, 1998:213–214).



Fig. 1. Prince Francesco Chigi observing some experiments with barn swallows. Reproduced from: Chigi, 1934.

The new ornithology

As reported elsewhere, in the 1930s Chigi shifted his scientific activity to the study of bird ecology, behaviour, and conservation (Toschi, 1954). This probably reflects a drastic change within ornithology, which was mainly prompted by German researchers. As reported by Haffer

(2001), the 1920s saw new trends in ornithological research, which were embedded in modern biological science rather than in old-fashioned natural history. Haffer (2001) named this the "Stresemann revolution" after Erwin Stresemann (1889–1972), the then bird curator of the Zoological Museum of Berlin University. Collaborators of Stresemann such as Oskar Heinroth (1871–1945), Konrad Lorenz (1903–1989), Otto Koelher (1889–1974) and Ernst Meyr (1904–2005) can give an idea of his accomplishments. Chigi, despite his status as a "civic ornithologist", maintained strong connections with the foreign ornithological community so that his approach remained novel. In 1931, for example, he asked Heinroth for a short paper on the development of newborn quails *Coturnix coturnix* (Linnaeus, 1758), which was translated by Theodor Knottnerus-Meyer (former director of the *Giardino Zoologico* in Rome) and published in the hunting journal *Venatoria* with the title *Quando mutano le nostre giovani quaglie?* It was reprinted separately with the first data about the migration of quails collected at the *Stazione Ornitologica di Castel Fusano* and authored by Ada Agostini and Mario Rotondi (Chigi *et al*., 1932). Contributions from the German ornithological world were often published in *Rassegna Faunistica* (Niethammer, 1935). This attempt to integrate lab and field data, the creation of an ornithological station at Castel Fusano in collaboration with the University of Rome, and his membership of the International Committee for Bird Preservation made Chigi well-known at an international level. When Margaret Morse Nice, one of the first followers of the new avian biology introduced by Meyr in the US, visited Europe and Italy in 1932, she was very impressed by her visit to Castel Fusano: "Ornithologically, my most interesting experience in Italy was a visit to Prince Chigi at Castel Fusano, Ostia. Between his quail-banding station on the seashore and Castel Fusano there stretches a beautiful wood of live oaks, maritime pines, and a great deal of underbrush. The bird life is very rich here under strict protection, and a large number of Raptores nest, among them the Black Kite, Buzzard, Kestrel, Sparrow Hawk, and the rare Honey Buzzard *Pernis apivorus* (Linnaeus, 1758). It was an inspiring sight to me to see two Harrier Eagles, or Biancone *Circaetus gallicus* (Gmelin, 1788), and the marvellously graceful great Kite *Milvus milvus* (Linnaeus, 1758), the Nibbeo Reale. So fascinated did I become with the Italian methods of capturing birds by whistling in the boschetto and with the trammel nets on the sand-dunes that I asked Prince Chigi whether he would not write an article for American banders on his methods, and his response to my request may be read in the April number of Bird-Banding vol. 4, pp. 59–67, 1933" (Chigi, 1933; Nice, 1933).

The conservationist

At the beginning of the 20th century, bird conservation and management through hunting were internationally relevant issues for which Italy faced strong criticism, as at the time it was lacking a national law on hunting, which would be passed only in 1923 (Arrigoni degli Oddi, 1927). The lack of a hunting law became a scientific issue, and the *Società Zoologica Italiana* held meetings on the preservation of wildlife and on a new hunting law for Italy. In 1912, botanist Lino Vaccari was invited to hold a conference in Rome on *La protezione della fauna italiana* (Vaccari, 1912), which had a great resonance. Chigi began his second phases of ornithological activity in the 1930s but the archives of Ettore Arrigoni degli Oddi feature a manuscript titled *Intorno al Disegno di legge formulato dalla Commissione Reale sulla caccia presentato da S.E. Rava*, which dated about 1905, and which demonstrated an early interest in the issue by Chigi (Fig. 2). In 1927, Arrigoni degli Oddi shortly reported about Italian legislative issues on the *Bulletin of the International Committee for Birds Preservation* (Arrigoni degli Oddi, 1927). This note is illustrated by the photos of three Italian members of the committee: Ettore Arrigoni degli Oddi, Alessandro Ghigi and Francesco Chigi. In 1930, Chigi began a noteworthy work of public education through the hunting journal *Venatoria*. The papers published on *Venatoria* were also reprinted separately by the *Stazione Ornitologica di Castelfusano*, probably to better reach the ornithological community. In 1933, Chigi was among the authors of a booklet titled *Gli uccelli amici dell'agricoltore* (Chigi *et al*., 1933), which featured a contribution from Prof. Oscar de Beaux, curator and later director of the Museum of Natural History "G. Doria" in Genoa, on *Principi di Etica Biologica*. Oscar de Beaux published in 1930 *Etica Biologica*, which would later be translated into English and German and which represents one of the first contributions to what is known today as Bioethics (Pedrotti, 2001; Gippoliti, 2006). One year later, Chigi launched *Rassegna Faunistica*, a new technical magazine intended to be both professional and aesthetically pleasing through the heavy use of photographs. Although *Rassegna Faunistica* was published only for 5 years (1934–1938), this attempt deserves greater attention in the framework of the history of environmental awareness in Italy.

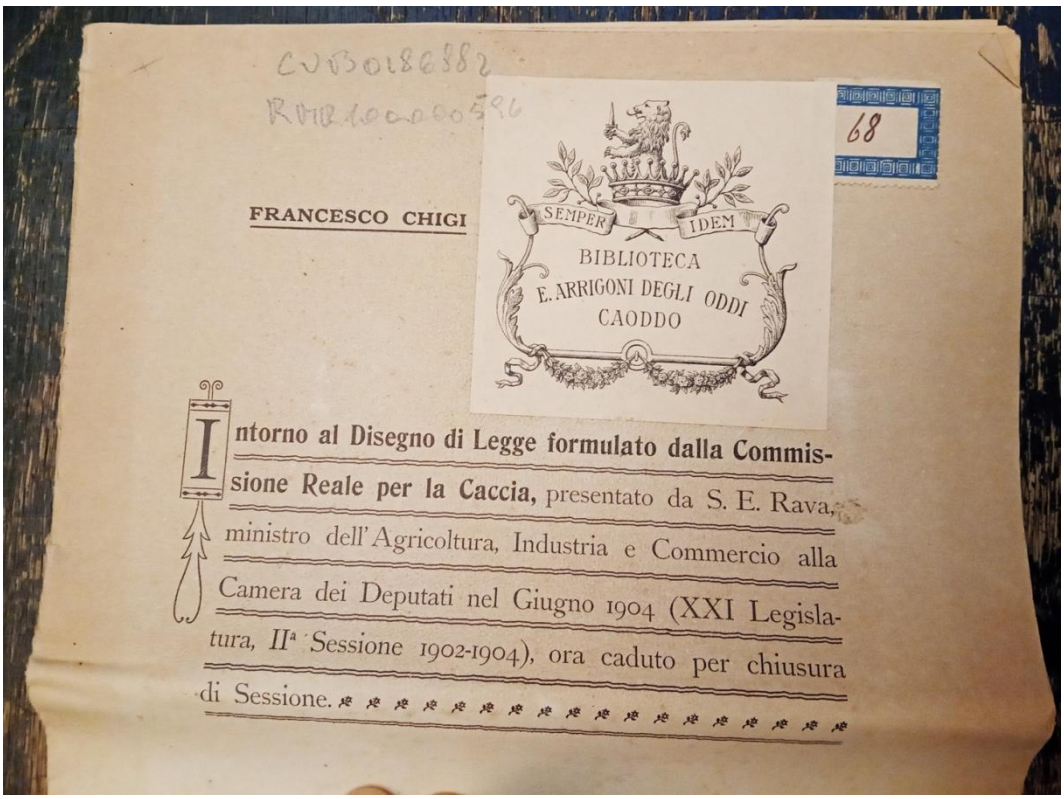


Fig. 2. Francesco Chigi's document on hunting law. Source: Archive Arrigoni degli Oddi, Museo Civico di Zoologia, Rome, Italy.

La morte delle specie animali

This is a lengthy and lavishly illustrated contribution of 46 pages (Chigi, 1936; Fig. 3). Chigi received photos (Fig. 4) from several foreign institutions such as the American Museum of Natural History and experts such as Thomas Gilbert Pearson (1873–1943), one of the founders of the International Committee for Bird Preservation (now Birdlife International). Other photos were obtained from the *Museo civico di Zoologia* in Rome and from the Zoological Museum of Florence University; some are drawings from private collections (Fig. 5). Chigi's first aim was to determine mankind's role in extinction processes. He rightly emphasized the relevance of the relatively recent avian extinctions of the auk *Alca impennis* (Linnaeus, 1758) and of the migratory pigeon *Ectopistes migratorius* (Linnaeus, 1766); "what would have happened in the future, with the extension of man's dominion over the Earth, if in a short time his destructive action had been able to annihilate not only the great auk but also the passenger pigeon, which numbered millions and millions of individuals?" (Chigi, 1936:3; translated by the author). Chigi also discusses avian extinctions in Italy by mentioning the black francolin *Francolinus francolinus*, the Andalusian buttonquail *Turnix sylvatica* (Desfontaines, 1787) and the bald ibis *Geronticus eremita* (Linnaeus, 1758), and criticised Arrigoni degli Oddi who denied its past presence in Europe. Extinctions and near-extinctions in North America were thoroughly reviewed as the paper also featured a picture of the last living *Tympanuchus cupido cupido* (Linnaues, 1758) on Martha's Vineyard Island before its extinction in 1932. Chigi's claims on intrinsic vulnerability in species such as the wild turkey *Meleagris gallopavo* (Linnaeus, 1758) seem largely paradoxically unsupported in the light of what is generally recognized as the North American model of wildlife conservation (Organ *et al*., 2012). For example, his comparison between the fate of the migratory pigeon in America and that of the common wood pigeon *Columba palumbus* (Linnaues, 1758) in Europe completely overlooked the fact that European men reached America only a few centuries before, and the same point is also missed in the discussion of island extinctions. The contribution, possibly intended to be only the first on the basis of the closing remarks, does not mention any ethical imperative against extinctions, although Chigi was well aware of de Beaux's Biological Ethics (de Beaux, 1930). It is possible that Chigi's text was conditioned by the then Italian political milieu as it was published during the Comprehensive Land Reclamation of the Pontine Marshes located south of Rome. However, we should also consider that the first comprehensive review of avian extinctions was published more than 20 years later (Greenway, 1958) and that conservation science was almost non-existent at the time, as well as knowledge about the interactions between ecology and social systems (Halliday, 1980), while topics such as Island Biogeography still awaited discovery (MacArthur & Wilson, 1963).

FRANCESCO CHIGI

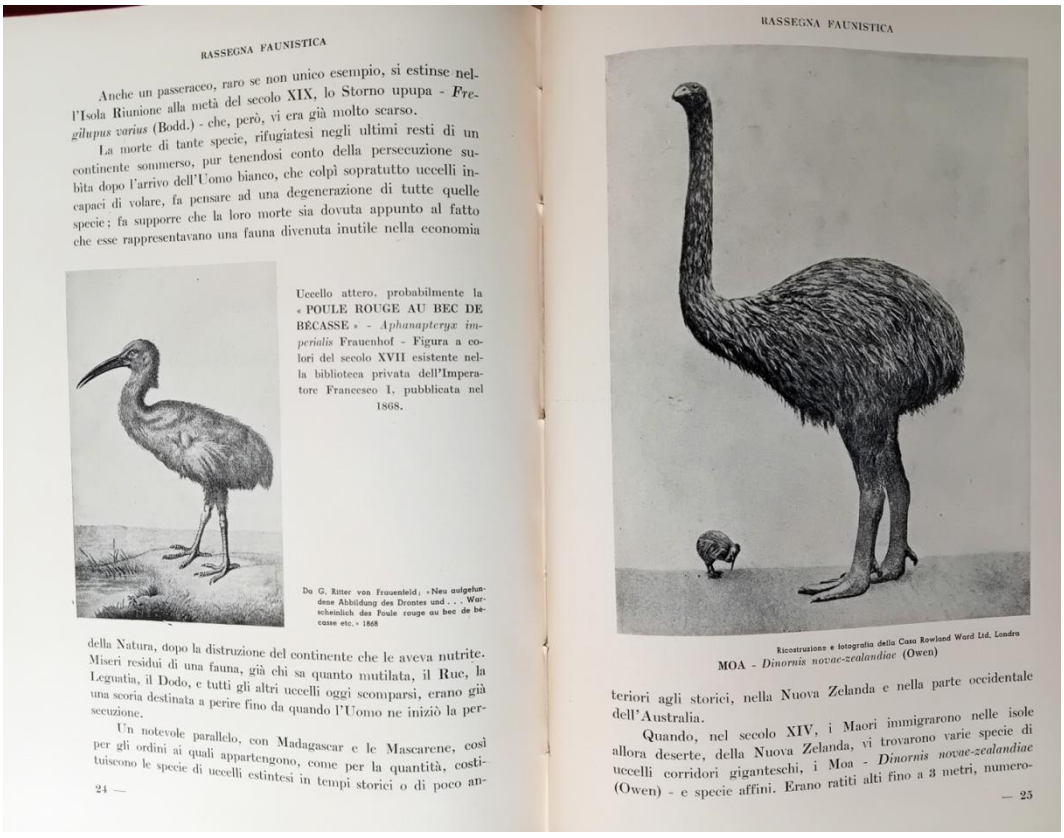
La morte delle specie animali



Incisione fiamminga del secolo XVII

URO - *Bos primigenius* Bojan. - Estinto nel secolo XVII

Fig. 3. Detail of the title of "La morte delle specie animali" with a XVII-century drawing of Uro *Bos primigenius*. Reproduced from: Chigi (1936).



RASSEGNA FAUNISTICA

Anche un passeraceo, raro se non unico esempio, si estinse nell'Isola Riunione alla metà del secolo XIX, lo Storno upupa - *Fregilupus varius* (Bodd.) - che, però, vi era già molto scarso.

La morte di tante specie, rifugiatesi negli ultimi resti di un continente sommerso, pur tenendosi conto della persecuzione subita dopo l'arrivo dell'Uomo bianco, che colpì sopratutto uccelli incapaci di volare, fa pensare ad una degenerazione di tutte quelle specie; fa supporre che la loro morte sia dovuta appunto al fatto che esse rappresentavano una fauna divenuta inutile nella economia della Natura, dopo la distruzione del continente che le aveva nutrite. Miseri residui di una fauna, già chi sa quanto mutilata, il Ruc, la Leguatia, il Dodo, e tutti gli altri uccelli oggi scomparsi, erano già una scoria destinata a perire fino da quando l'Uomo ne iniziò la persecuzione.

Un notevole parallelo, con Madagascar e le Mascarene, così per gli ordini ai quali appartengono, come per la quantità, costituiscono le specie di uccelli estintesi in tempi storici o di poco anteriori agli storici, nella Nuova Zelanda e nella parte occidentale dell'Australia.

Quando, nel secolo XIV, i Maori immigrarono nelle isole allora deserte, della Nuova Zelanda, vi trovarono varie specie di uccelli corridori giganteschi, i Moa - *Dinornis novae-zealandiae* (Owen) - e specie affini. Erano ratiti alti fino a 3 metri, numero-

Uccello attero, probabilmente la « POULE ROUGE AU BEC DE BÉCASSE » - *Aphanapteryx imperialis* Frauenhof - Figura a colori del secolo XVII esistente nella biblioteca privata dell'Imperatore Francesco I, pubblicata nel 1868.

Da G. Ritter von Frauenfeld: «Neu aufgefundene Abbildung des Drontes und . . . Warscheinlich des Poule rouge au bec de bécasse etc.» 1868

RASSEGNA FAUNISTICA

Ricostruzione e fotografia della Casa Rowland Ward Ltd, Londra

MOA - *Dinornis novae-zealandiae* (Owen)

24 —

— 25

Fig. 4. Two pages with two of the 26 illustrations included in the paper. Reproduced from: Chigi (1936).

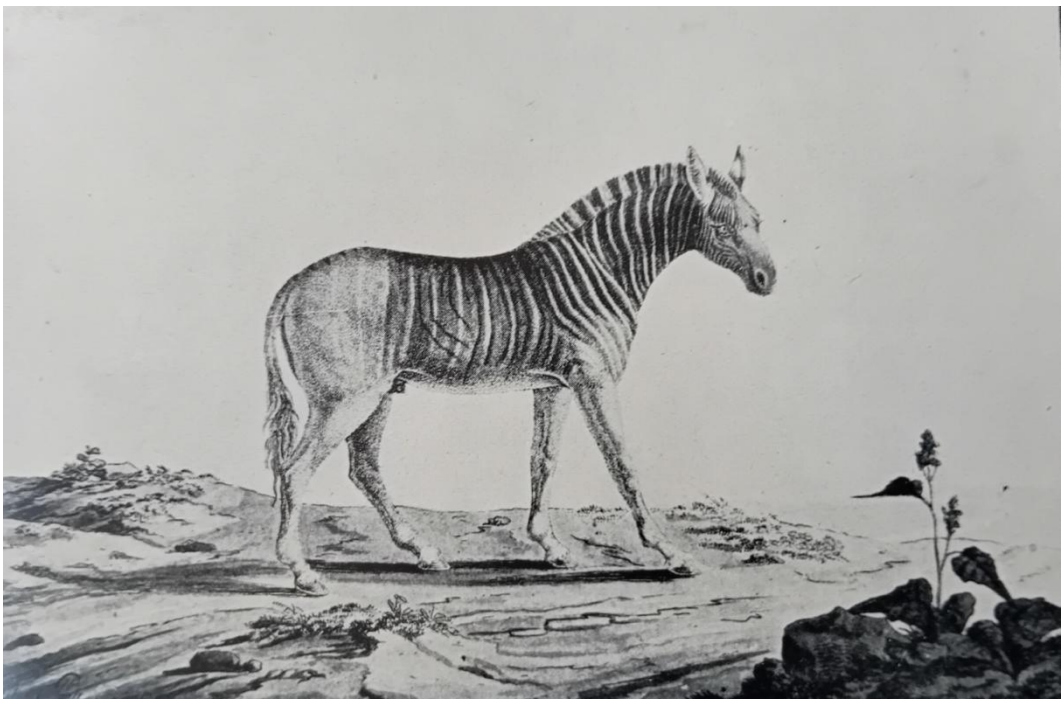


Fig. 5. Drawing of a quagga *Equus quagga*, said to belong to Count de Germiny, Florence (see text). Reproduced from: Chigi (1936).

Conclusions

Rassegna Faunistica marked an early attempt to create in Italy a wider basis for naturalistic studies and environmental awareness that has been, so far, scarcely considered in historical environmental studies. Francesco Chigi was geographically isolated in Rome, while most of the then pioneers of conservation lived in northern Italy. Yet his journal was open to contributions of national relevance, such as the status of monk seal in Sardinia (Del Lungo, 1935), the breeding of the black-winged stilt *Himantopus himantopus* in Tuscany (Catarini, 1936), or the creation of a National Park on the Adamello-Brenta massif for the conservation of the last Alpine brown bears (Gallarati Scotti, 1937; see also Chigi, 1935). Hopefully, the present contribution will represent only the first step in an effort to re-evaluate the contribution of Francesco Chigi to ornithology and bird conservation.

ACKNOWLEDGEMENTS

I wish to thank Roberto Casalini (Museo Civico di Zoologia, Rome) for facilitating access to the library and archives stored in the museum.

RIASSUNTO

Francesco Chigi, ornitologo civico e pioniere della conservazione, a 90 anni da "La morte delle specie animali" (The death of animal species).

Relativamente poco è stato scritto sull'attività ornitologica e di conservazione di Francesco Chigi Della Rovere, personaggio di rilievo nella Roma della prima metà del ventesimo secolo.

Allo scopo di rivalutare la sua pionieristica attività nel campo della conservazione degli uccelli, partiamo dai 90 anni di un suo pregevole – ma scarsamente conosciuto – contributo sul tema dell'estinzione delle specie animali, apparso sulla rivista *Rassegna Faunistica* da lui stesso creata. Sebbene assolutamente preliminare, questo contributo ha il pregio di inserire Chigi nel contesto storico della "nuova ornitologia" che nasce in Germania negli anni venti dello scorso secolo, ma anche nel movimento internazionale per la protezione degli uccelli, di chiara radice anglo-sassone.

Parole chiave: consapevolezza ambientale, caccia, estinzioni, Italia, Stazione Ornitologica di Castel Fusano.

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Conflict of interest: the author declares that he has no competing interests.

Availability of data and materials: no new data were created or analyzed in this study. Data sharing is therefore not applicable to this article.

Declaration of generative artificial intelligence and artificial intelligence-assisted technologies in the writing process: no such tools were utilized during the preparation of this work.