

Electronic Supplementary Information for Dalton Transactions
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ESI data for Dalton Transactions paper:

Lanthanide containing compounds for therapeutic care in bone resorption disorders[†]

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[†] Electronic supplementary information (ESI) available: Table of IR data and ¹H NMR example of metal binding (Hma and La(ma)₃ spectrum).

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Figure S1. ^1H NMR (300 MHz, RT, CD_3OD) of Hma (top) and $\text{La}(\text{ma})_3$ (bottom). Absence of peaks corresponding to the ligand and shifting of all signals in the $\text{La}(\text{ma})_3$ spectra suggest the formation of the metal complex.

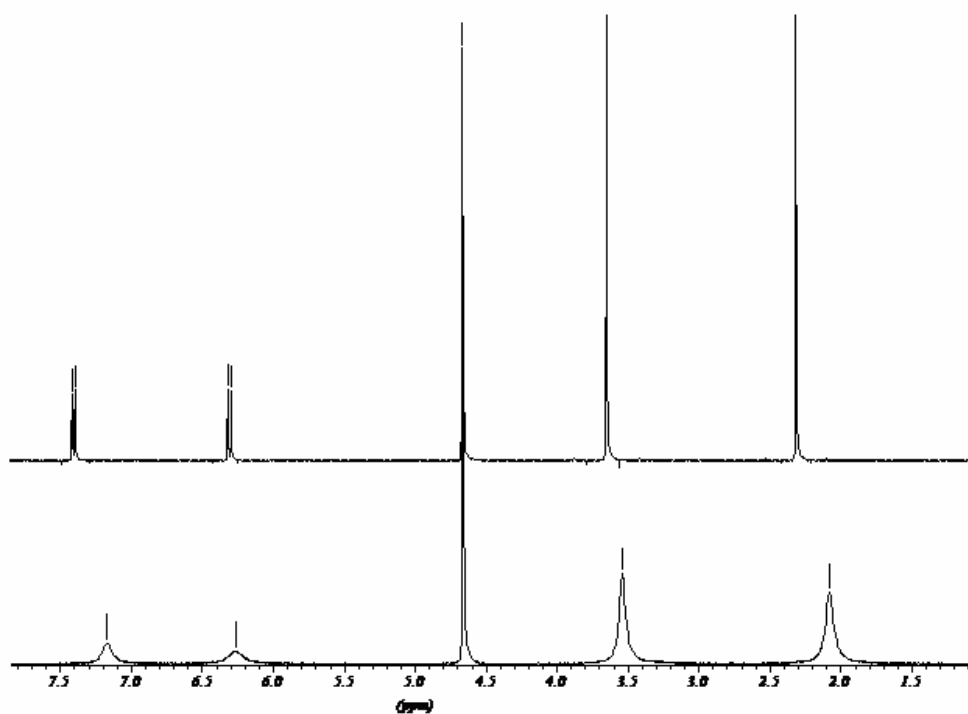


Table S1 Selected IR stretches (cm^{-1}) of all the Ln(III) complexes. All peaks of the Ln(III) complexes were slightly shifted compared to their corresponding proligands.

	Hma	La(ma) ₃	Gd(ma) ₃	Yb(ma) ₃	Hema	La(ema) ₃	Gd(ema) ₃	Yb(ema) ₃
$\nu\text{OH}(\text{b,s})$	3250	3435	3439	3452	3250	3381	3420	3454
νRing	1555	1513	1514	1516	1555	1505	1515	1516
					1485	1470	1470	1471
					1451	1450	1452	1456
$\nu\text{C}=\text{O}$	1650	1597	1599	1604	1650	1599	1605	1608
	1615	1571	1574	1580	1614	1590	1592	1595
νCO	1294	1332	1333	1334	1317	1333	1333	1334
$\nu\text{C-O-C}$	1260	1283	1286	1291	1266	1287	1287	1292
νCH_3	2927	2973	2974	2976	2982	2975	2976	2977
$\nu\text{M-O}$		427	436	440		425	427	441

	Hmpp	La(mpp) ₃	Gd(mpp) ₃	Yb(mpp) ₃	Hdpp	La(mpp) ₃	Gd(mpp) ₃	Yb(mpp) ₃
$\nu\text{OH}(\text{b,s})$	3270	3265	3262	3250	3150	3424	3414	3357
νRing	1540	1503	1520	1528	1530	1504	1505	1510
	1500	1481	1501	1512	1515	1485	1501	1502
	1420	1395	1402	1403	1400	1456	1456	1459
$\nu\text{C}=\text{O}$	1645	1598	1599	1601	1630	1591	1597	1598
					1565	1538	1544	1548
νCH_3	2950	2954	2955	2955	2940	2947	2955	2955
νCO	1335	1361	1362	1364	1335	1363	1364	1366
νCN					1250	1294	1295	1299
$\nu\text{C-N-C}$	476	531	531	535	476	481	486	487
$\nu\text{M-O}$		432	435	445		436	442	446