

Artemio Moján-Ojea

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8260783/publications.pdf>

Version: 2024-02-01

118
papers

5,839
citations

57758

44
h-index

76900

74
g-index

127
all docs

127
docs citations

127
times ranked

2976
citing authors

#	ARTICLE	IF	CITATIONS
1	Elevated asleep blood pressure and non-dipper 24h patterning best predict risk for heart failure that can be averted by bedtime hypertension chronotherapy: A review of the published literature. <i>Chronobiology International</i> , 2023, 40, 63-82.	2.0	4
2	Consideration of nondipping heart rate during ambulatory blood pressure monitoring to improve cardiovascular risk assessment. Response. <i>Revista Espanola De Cardiologia (English Ed)</i> , 2022, 75, 356.	0.6	0
3	Ingestion-time differences in the pharmacodynamics of dual-combination hypertension therapies: Systematic review and meta-analysis of published human trials. <i>Chronobiology International</i> , 2022, 39, 493-512.	2.0	6
4	Cardiovascular disease risk stratification by the Framingham score is markedly improved by ambulatory compared with office blood pressure. <i>Revista Espanola De Cardiologia (English Ed)</i> , 2021, 74, 953-961.	0.6	4
5	Guidelines for the design and conduct of human clinical trials on ingestion-time differences of chronopharmacology and chronotherapy of hypertension medications. <i>Chronobiology International</i> , 2021, 38, 1-26.	2.0	22
6	Ingestion-time differences in the pharmacodynamics of hypertension medications: Systematic review of human chronopharmacology trials. <i>Advanced Drug Delivery Reviews</i> , 2021, 170, 200-213.	13.7	20
7	Systematic review and quality evaluation of published human ingestion-time trials of blood pressure-lowering medications and their combinations. <i>Chronobiology International</i> , 2021, 38, 1460-1476.	2.0	9
8	Lowering Nighttime Blood Pressure With Bedtime Dosing of Antihypertensive Medications: Controversies in Hypertension Pro Side of the Argument. <i>Hypertension</i> , 2021, 78, 879-893.	2.7	7
9	Extent of asleep blood pressure reduction by hypertension medications is ingestion-time dependent: Systematic review and meta-analysis of published human trials. <i>Sleep Medicine Reviews</i> , 2021, 59, 101454.	8.5	24
10	La presión arterial ambulatoria, en comparación con la medida clínica, mejora notablemente la estratificación del riesgo cardiovascular de Framingham. <i>Revista Espanola De Cardiologia</i> , 2021, 74, 953-961.	1.2	7
11	Bedtime hypertension treatment improves cardiovascular risk reduction: the Hygia Chronotherapy Trial. <i>European Heart Journal</i> , 2020, 41, 4565-4576.	2.2	272
12	Bedtime hypertension chronotherapy best reduces cardiovascular disease risk as documented by MAPEC and Hygia Chronotherapy outcomes trials. <i>Chronobiology International</i> , 2020, 37, 731-738.	2.0	9
13	Chronotherapy of hypertension: advantages of 48-h ambulatory blood pressure monitoring assessments in MAPEC and Hygia Chronotherapy Trial. <i>Chronobiology International</i> , 2020, 37, 739-750.	2.0	12
14	Does Timing of Antihypertensive Medication Dosing Matter?. <i>Current Cardiology Reports</i> , 2020, 22, 118.	2.9	14
15	Bedtime hypertension chronotherapy best reduces cardiovascular disease risk as corroborated by the Hygia Chronotherapy Trial. Rebuttal to European Society of Hypertension officials.. <i>Chronobiology International</i> , 2020, 37, 771-780.	2.0	5
16	Ambulatory blood pressure-based inclusion criteria in the Hygia Chronotherapy Trial. Rebuttal to Lemmer and Middeke. <i>Chronobiology International</i> , 2020, 37, 1270-1272.	2.0	0
17	Current evidence on the circadian-time-dependent effects of hypertension medications and their combinations in relation to findings of MAPEC and Hygia Chronotherapy Trial. <i>Chronobiology International</i> , 2020, 37, 751-758.	2.0	7
18	Ingestion-time relative to circadian rhythms differences in the pharmacokinetics and pharmacodynamics of hypertension medications. <i>Expert Opinion on Drug Metabolism and Toxicology</i> , 2020, 16, 1159-1173.	3.3	17

#	ARTICLE	IF	CITATIONS
19	New perspectives on the definition, diagnosis, and treatment of true arterial hypertension. Expert Opinion on Pharmacotherapy, 2020, 21, 1167-1178.	1.8	10
20	Comparing the design of the primary-care based Hygia Chronotherapy Trial and the Internet-Based TIME Study. European Heart Journal, 2020, 41, 1608-1608.	2.2	11
21	Chronotherapy of hypertension, asleep ambulatory blood pressure, and glaucoma. European Heart Journal, 2020, 41, 1605-1605.	2.2	9
22	Ambulatory blood pressure monitoring-based definition of true arterial hypertension. Minerva Medica, 2020, 111, 573-588.	0.9	12
23	Diagnosis and management of hypertension: around-the-clock ambulatory blood pressure monitoring is substantially more effective and less costly than daytime office blood pressure measurements. Chronobiology International, 2019, 36, 1515-1527.	2.0	15
24	Asleep (not night-time) blood pressure as prognostic marker of cardiovascular risk. European Heart Journal, 2019, 40, 789-789.	2.2	2
25	Response: Aspirin Administered at Bedtime as Opposed to Upon Wakening Has an Effect on Ambulatory Blood Pressure: Further Evidence. Hypertension, 2019, , .	2.7	0
26	Hypertension: New perspective on its definition and clinical management by bedtime therapy substantially reduces cardiovascular disease risk. European Journal of Clinical Investigation, 2018, 48, e12909.	3.4	46
27	Risk of incident chronic kidney disease is better reduced by bedtime than upon-awakening ingestion of hypertension medications. Hypertension Research, 2018, 41, 342-353.	2.7	15
28	Asleep blood pressure: significant prognostic marker of vascular risk and therapeutic target for prevention. European Heart Journal, 2018, 39, 4159-4171.	2.2	110
29	Sleep-time blood pressure: Unique sensitive prognostic marker of vascular risk and therapeutic target for prevention. Sleep Medicine Reviews, 2017, 33, 17-27.	8.5	48
30	Sleep-Time Ambulatory BP Is an Independent Prognostic Marker of CKD. Journal of the American Society of Nephrology: JASN, 2017, 28, 2802-2811.	6.1	14
31	Bedtime Blood Pressure Chronotherapy Significantly Improves Hypertension Management. Heart Failure Clinics, 2017, 13, 759-773.	2.1	19
32	Bedtime Chronotherapy with Conventional Hypertension Medications to Target Increased Asleep Blood Pressure Results in Markedly Better Chrono prevention of Cardiovascular and Other Risks than Customary On-awakening Therapy. Heart Failure Clinics, 2017, 13, 775-792.	2.1	14
33	Elevated asleep BP as predictor of type 2 diabetes and therapeutic target for prevention. Diabetologia, 2016, 59, 392-394.	6.3	3
34	Chronotherapy with conventional blood pressure medications improves management of hypertension and reduces cardiovascular and stroke risks. Hypertension Research, 2016, 39, 277-292.	2.7	96
35	Sleep-time BP: prognostic marker of type 2 diabetes and therapeutic target for prevention. Diabetologia, 2016, 59, 244-254.	6.3	30
36	Bedtime ingestion of hypertension medications reduces the risk of new-onset type 2 diabetes: a randomised controlled trial. Diabetologia, 2016, 59, 255-265.	6.3	51

#	ARTICLE	IF	CITATIONS
37	Chronotherapeutics of Conventional Blood Pressure-Lowering Medications: Simple, Low-Cost Means of Improving Management and Treatment Outcomes of Hypertensive-Related Disorders. <i>Current Hypertension Reports</i> , 2014, 16, 412.	3.5	25
38	Abnormalities in chronic kidney disease of ambulatory blood pressure 24 h patterning and normalization by bedtime hypertension chronotherapy. <i>Nephrology Dialysis Transplantation</i> , 2014, 29, 1160-1167.	0.7	27
39	Around-the-clock Ambulatory Blood Pressure Monitoring is Required to Properly Diagnose Resistant Hypertension and Assess Associated Vascular Risk. <i>Current Hypertension Reports</i> , 2014, 16, 445.	3.5	10
40	Chronotherapy improves blood pressure control and reduces vascular risk in CKD. <i>Nature Reviews Nephrology</i> , 2013, 9, 358-368.	9.6	48
41	Clinical Application of a Novel Automatic Algorithm for Actigraphy-Based Activity and Rest Period Identification to Accurately Determine Awake and Asleep Ambulatory Blood Pressure Parameters and Cardiovascular Risk. <i>Chronobiology International</i> , 2013, 30, 43-54.	2.0	26
42	Circadian Pattern of Ambulatory Blood Pressure in Hypertensive Patients With and Without Type 2 Diabetes. <i>Chronobiology International</i> , 2013, 30, 99-115.	2.0	103
43	Sleep-Time Blood Pressure: Prognostic Value and Relevance as a Therapeutic Target for Cardiovascular Risk Reduction. <i>Chronobiology International</i> , 2013, 30, 68-86.	2.0	79
44	Cardiovascular Risk of Resistant Hypertension: Dependence on Treatment-Time Regimen of Blood Pressure-Lowering Medications. <i>Chronobiology International</i> , 2013, 30, 340-352.	2.0	67
45	Administration-Time Differences in Effects of Hypertension Medications on Ambulatory Blood Pressure Regulation. <i>Chronobiology International</i> , 2013, 30, 280-314.	2.0	86
46	Treatment-Time Regimen of Hypertension Medications Significantly Affects Ambulatory Blood Pressure and Clinical Characteristics of Patients With Resistant Hypertension. <i>Chronobiology International</i> , 2013, 30, 192-206.	2.0	37
47	Influence of Age and Hypertension Treatment-time on Ambulatory Blood Pressure in Hypertensive Patients. <i>Chronobiology International</i> , 2013, 30, 176-191.	2.0	42
48	Administration-Time-Dependent Effects of Hypertension Treatment on Ambulatory Blood Pressure in Patients With Chronic Kidney Disease. <i>Chronobiology International</i> , 2013, 30, 159-175.	2.0	49
49	Cardiovascular Risk of Essential Hypertension: Influence of Class, Number, and Treatment-Time Regimen of Hypertension Medications. <i>Chronobiology International</i> , 2013, 30, 315-327.	2.0	55
50	Comparison of Ambulatory Blood Pressure Parameters of Hypertensive Patients With and Without Chronic Kidney Disease. <i>Chronobiology International</i> , 2013, 30, 145-158.	2.0	122
51	Differences Between Men and Women in Ambulatory Blood Pressure Thresholds for Diagnosis of Hypertension Based on Cardiovascular Outcomes. <i>Chronobiology International</i> , 2013, 30, 221-232.	2.0	48
52	Role of Time-of-Day of Hypertension Treatment on the J-Shaped Relationship Between Blood Pressure and Cardiovascular Risk. <i>Chronobiology International</i> , 2013, 30, 328-339.	2.0	25
53	Ambulatory Blood Pressure Thresholds for Diagnosis of Hypertension in Patients With and Without Type 2 Diabetes Based on Cardiovascular Outcomes. <i>Chronobiology International</i> , 2013, 30, 132-144.	2.0	13
54	Blunted Sleep-Time Relative Blood Pressure Decline Increases Cardiovascular Risk Independent of Blood Pressure Level—The “Normotensive Non-dipper” Paradox. <i>Chronobiology International</i> , 2013, 30, 87-98.	2.0	155

#	ARTICLE	IF	CITATIONS
55	Effects of Time-of-Day of Hypertension Treatment on Ambulatory Blood Pressure and Clinical Characteristics of Patients With Type 2 Diabetes. <i>Chronobiology International</i> , 2013, 30, 116-131.	2.0	39
56	Ambulatory Blood Pressure Monitoring: Importance of Sampling Rate and Durationâ€”48 Versus 24 Hoursâ€”on the Accurate Assessment of Cardiovascular Risk. <i>Chronobiology International</i> , 2013, 30, 55-67.	2.0	80
57	2013 Ambulatory Blood Pressure Monitoring Recommendations for the Diagnosis of Adult Hypertension, Assessment of Cardiovascular and other Hypertension-associated Risk, and Attainment of Therapeutic Goals. <i>Chronobiology International</i> , 2013, 30, 355-410.	2.0	168
58	Morning Surge, Dipping, and Sleep-Time Blood Pressure as Prognostic Markers of Cardiovascular Risk. <i>Hypertension</i> , 2013, 61, e3.	2.7	6
59	Asleep blood pressure: relevance to the proper definition of isolated-office and masked hypertension. <i>Hypertension Research</i> , 2013, 36, 471-472.	2.7	2
60	Sleep-Time Blood Pressure as a Therapeutic Target for Cardiovascular Risk Reduction in Type 2 Diabetes. <i>American Journal of Hypertension</i> , 2012, 25, 325-334.	2.0	74
61	Sleep-Time Blood Pressure and the Prognostic Value of Isolated-Office and Masked Hypertension. <i>American Journal of Hypertension</i> , 2012, 25, 297-305.	2.0	72
62	Automatic identification of activityâ€”rest periods based on actigraphy. <i>Medical and Biological Engineering and Computing</i> , 2012, 50, 329-340.	2.8	27
63	Chronotherapy With Valsartan/Hydrochlorothiazide Combination in Essential Hypertension: Improved Sleep-Time Blood Pressure Control With Bedtime Dosing. <i>Chronobiology International</i> , 2011, 28, 601-610.	2.0	55
64	Influence of Time of Day of Blood Pressureâ€”Lowering Treatment on Cardiovascular Risk in Hypertensive Patients With Type 2 Diabetes. <i>Diabetes Care</i> , 2011, 34, 1270-1276.	8.6	196
65	Decreasing Sleep-Time Blood Pressure Determined by Ambulatory Monitoring Reduces Cardiovascular Risk. <i>Journal of the American College of Cardiology</i> , 2011, 58, 1165-1173.	2.8	270
66	Relationship Between Metabolic Syndrome, Circadian Treatment Time, and Blood Pressure Non-Dipping Profile in Essential Hypertension. <i>Chronobiology International</i> , 2011, 28, 509-519.	2.0	20
67	Bedtime Dosing of Antihypertensive Medications Reduces Cardiovascular Risk in CKD. <i>Journal of the American Society of Nephrology: JASN</i> , 2011, 22, 2313-2321.	6.1	239
68	Effects of Time of Antihypertensive Treatment on Ambulatory Blood Pressure and Clinical Characteristics of Subjects With Resistant Hypertension. <i>American Journal of Hypertension</i> , 2010, 23, 432-439.	2.0	41
69	ADMINISTRATION-TIME-DEPENDENT EFFECTS OF SPIRAPRIL ON AMBULATORY BLOOD PRESSURE IN UNCOMPLICATED ESSENTIAL HYPERTENSION. <i>Chronobiology International</i> , 2010, 27, 560-574.	2.0	48
70	INFLUENCE OF CIRCADIAN TIME OF HYPERTENSION TREATMENT ON CARDIOVASCULAR RISK: RESULTS OF THE MAPEC STUDY. <i>Chronobiology International</i> , 2010, 27, 1629-1651.	2.0	489
71	CHRONOTHERAPY WITH VALSARTAN/AMLODIPINE FIXED COMBINATION: IMPROVED BLOOD PRESSURE CONTROL OF ESSENTIAL HYPERTENSION WITH BEDTIME DOSING. <i>Chronobiology International</i> , 2010, 27, 1287-1303.	2.0	67
72	CIRCADIAN PATTERN OF AMBULATORY BLOOD PRESSURE IN UNTREATED HYPERTENSIVE PATIENTS WITH AND WITHOUT METABOLIC SYNDROME. <i>Chronobiology International</i> , 2009, 26, 1189-1205.	2.0	23

#	ARTICLE	IF	CITATIONS
73	Circadian Pattern of Ambulatory Blood Pressure in Untreated Hypertensive Patients with and without Metabolic Syndrome. <i>Chronobiology International</i> , 2009, 26, 1189-1205.	2.0	2
74	Association of Metabolic Syndrome and Blood Pressure Nondipping Profile in Untreated Hypertension. <i>American Journal of Hypertension</i> , 2009, 22, 307-313.	2.0	36
75	Ambulatory Blood Pressure Control With Bedtime Aspirin Administration in Subjects With Prehypertension. <i>American Journal of Hypertension</i> , 2009, 22, 896-903.	2.0	55
76	Administration Time-Dependent Effects of Olmesartan on the Ambulatory Blood Pressure of Essential Hypertension Patients. <i>Chronobiology International</i> , 2009, 26, 61-79.	2.0	85
77	Reduction of morning blood pressure surge after treatment with nifedipine GITS at bedtime, but not upon awakening, in essential hypertension. <i>Blood Pressure Monitoring</i> , 2009, 14, 152-159.	0.8	33
78	Comparison of the Effects on Ambulatory Blood Pressure of Awakening versus Bedtime Administration of Torasemide in Essential Hypertension. <i>Chronobiology International</i> , 2008, 25, 950-970.	2.0	62
79	Chronotherapy With Nifedipine GITS in Hypertensive Patients: Improved Efficacy and Safety With Bedtime Dosing. <i>American Journal of Hypertension</i> , 2008, 21, 948-954.	2.0	80
80	Dose-And Administration Time-Dependent Effects Of Nifedipine Gits On Ambulatory Blood Pressure In Hypertensive Subjects. <i>Chronobiology International</i> , 2007, 24, 471-493.	2.0	45
81	Circadian rhythm of fasting and postprandial portal blood flow in cirrhosis. <i>Scandinavian Journal of Gastroenterology</i> , 2006, 41, 826-832.	1.5	15
82	Treatment of non-dipper hypertension with bedtime administration of valsartan. <i>Journal of Hypertension</i> , 2005, 23, 1913-1922.	0.5	109
83	Differing Administration Time-Dependent Effects of Aspirin on Blood Pressure in Dipper and Non-Dipper Hypertensives. <i>Hypertension</i> , 2005, 46, 1060-1068.	2.7	55
84	Administration Time-Dependent Effects of Valsartan on Ambulatory Blood Pressure in Elderly Hypertensive Subjects. <i>Chronobiology International</i> , 2005, 22, 755-776.	2.0	54
85	Effects of Time of Day of Treatment on Ambulatory Blood Pressure Pattern of Patients With Resistant Hypertension. <i>Hypertension</i> , 2005, 46, 1053-1059.	2.7	110
86	Increased prevalence of blunted nocturnal ambulatory blood pressure decline in patients with metabolic syndrome. <i>American Journal of Hypertension</i> , 2005, 18, A197-A197.	2.0	0
87	Comparison of Parameters from Rhythmometric Models with Multiple Components on Hybrid Data. <i>Chronobiology International</i> , 2004, 21, 469-484.	2.0	44
88	Circadian Time-Qualified Tolerance Intervals for Ambulatory Blood Pressure Monitoring in the Diagnosis of Hypertension. <i>Chronobiology International</i> , 2004, 21, 147-160.	2.0	12
89	Administration time-dependent effects on ambulatory blood pressure of doxazosin gits as added therapy in uncontrolled hypertensive patients. <i>American Journal of Hypertension</i> , 2004, 17, S108-S109.	2.0	0
90	Circadian pattern of ambulatory pulse pressure in normal pregnancy, gestational hypertension, and preeclampsia. <i>American Journal of Hypertension</i> , 2004, 17, S160-S161.	2.0	0

#	ARTICLE	IF	CITATIONS
91	Differences in day/night blood pressure ratio between normal pregnancy, gestational hypertension, and preeclampsia. <i>American Journal of Hypertension</i> , 2004, 17, S161.	2.0	0
92	Reproducibility of the tolerance-hyperbaric test for diagnosing hypertension in pregnancy. <i>Journal of Hypertension</i> , 2004, 22, 565-572.	0.5	14
93	Differences in circadian blood pressure variability during gestation between healthy and complicated pregnancies. <i>American Journal of Hypertension</i> , 2003, 16, 200-208.	2.0	33
94	Administration Time-Dependent Effects of Aspirin on Blood Pressure in Untreated Hypertensive Patients. <i>Hypertension</i> , 2003, 41, 1259-1267.	2.7	69
95	Administration Time-Dependent Effects of Valsartan on Ambulatory Blood Pressure in Hypertensive Subjects. <i>Hypertension</i> , 2003, 42, 283-290.	2.7	144
96	Seasonal Variation of Fibrinogen in Dipper and Nondipper Hypertensive Patients. <i>Circulation</i> , 2003, 108, 1101-1106.	1.6	59
97	Methods for Comparison of Parameters from Longitudinal Rhythmometric Models with Multiple Components. <i>Chronobiology International</i> , 2003, 20, 495-513.	2.0	10
98	THE TOLERANCE-HYPERBARIC TEST: A CHRONOBIOLOGIC APPROACH FOR IMPROVED DIAGNOSIS OF HYPERTENSION. <i>Chronobiology International</i> , 2002, 19, 1183-1211.	2.0	51
99	Relationship between physical activity and blood pressure in dipper and non-dipper hypertensive patients. <i>Journal of Hypertension</i> , 2002, 20, 1097-1104.	0.5	119
100	Modeling the circadian variability of ambulatorily monitored blood pressure by multiple-component analysis. <i>Chronobiology International</i> , 2002, 19, 461-481.	2.0	106
101	Circadian blood pressure patterns in normal pregnancy, gestational hypertension, and preeclampsia. <i>American Journal of Hypertension</i> , 2002, 15, A27-A28.	2.0	0
102	Physical activity is not the major determinant of nocturnal non-dipping of blood pressure in hypertensive patients. <i>American Journal of Hypertension</i> , 2002, 15, A75.	2.0	0
103	Lack of relationship between physical activity and blood pressure in riser and extreme-dipper hypertensive patients. <i>American Journal of Hypertension</i> , 2002, 15, A75-A76.	2.0	0
104	Time-qualified tolerance limits for ambulatory blood pressure monitoring in the diagnosis of hypertension. <i>American Journal of Hypertension</i> , 2002, 15, A76.	2.0	1
105	Diurnal, nocturnal or 24-hour mean blood pressure values for the diagnosis of gestational hypertension. which should be used?. <i>American Journal of Hypertension</i> , 2002, 15, A77.	2.0	0
106	Differences in wrist activity between dominant and non-dominant arms in subjects under ambulatory blood pressure monitoring. <i>American Journal of Hypertension</i> , 2002, 15, A77-A78.	2.0	0
107	Pressor response to ambulatory blood pressure monitoring in normotensive subjects. <i>American Journal of Hypertension</i> , 2002, 15, A78.	2.0	0
108	Changes in the circadian blood pressure pattern due to antihypertensive therapy in elderly patients. <i>American Journal of Hypertension</i> , 2002, 15, A80.	2.0	0

#	ARTICLE	IF	CITATIONS
109	CIRCADIAN RHYTHM OF DOUBLE (RATE-PRESSURE) PRODUCT IN HEALTHY NORMOTENSIVE YOUNG SUBJECTS. Chronobiology International, 2001, 18, 475-489.	2.0	76
110	Reanalysis of Filter-Feeding Behavior of Caddis Fly (<i>Brachycentrus</i>) Larvae Reveals Masking and Circadian Rhythmicity. Chronobiology International, 1998, 15, 595-606.	2.0	2
111	High sensitivity test for the early diagnosis of gestational hypertension and preeclampsia. I. Predictable variability of cardiovascular characteristics during gestation in healthy and hypertensive pregnant women. Journal of Perinatal Medicine, 1997, 25, 101-109.	1.4	23
112	High sensitivity test for the early diagnosis of gestational hypertension and preeclampsia. II. Circadian blood pressure variability in healthy and hypertensive pregnant women. Journal of Perinatal Medicine, 1997, 25, 153-167.	1.4	19
113	Influence of Aspirin Usage on Blood Pressure: Dose and Administration-Time Dependencies. Chronobiology International, 1997, 14, 619-637.	2.0	36
114	Ultradian rhythms in gross motor activity of adult humans. Physiology and Behavior, 1995, 57, 411-419.	2.1	12
115	Neonatal Cardiovascular Dynamics in Relation to Matroclinous and Patroclinous History of High Blood Pressure. Chronobiology International, 1993, 10, 214-223.	2.0	0
116	Chronolab: An Interactive Software Package for Chronobiologic Time Series Analysis Written for the Macintosh Computer. Chronobiology International, 1992, 9, 403-412.	2.0	263
117	Sleep-Time Blood Pressure as a Therapeutic Target for Cardiovascular Risk Reduction in Type 2 Diabetes. , 0, .		1
118	Circadian Pattern of Ambulatory Blood Pressure in Hypertensive Patients With and Without Type 2 Diabetes. , 0, .		1