

## RETRACTION

## Retraction: Evidence That Head and Body Lice on Homeless Persons Have the Same Genotype

The *PLOS ONE* Editors

The *PLOS ONE* Editors retract this article [1, 2] due to concerns about compliance with the PLOS Human Subjects Research policy.

The Methods section in [1] reports that the study involved samples collected in 2010 and that the study protocol was approved by the Institutional Review Board and Ethics Committee of Marseille, under approval number 10.005. A representative of the Aix-Marseille Université Ethics Committee stated that the samples mentioned in the publication are exclusively lice collected in 2010 as part of research authorized by the Comité de Protection des Personnes (CPP); they provided the CPP ethics approval document 2010-A01406-33 which indicates that the CPP approved the study on or after January 24, 2011. PLOS does not accept retrospective ethics approval.

In addition, PLOS identified potential competing interests between members of the Ethics Committee of the Institut Fédératif de Recherche (IFR) 48 that issued document #10.005 and one or more of the article's authors. Furthermore, the ethics approval numbers cited for this study have been reported in numerous articles (#10.005 in [3–7] and #2010-A01406-33 in [8–27]) which address different research objectives.

The representative of the Aix-Marseille Université Ethics Committee stated that the institute disagrees with the retraction decision, and that their investigation has not determined that the article violates French regulations or international ethics rules. They stated that the study is not considered research involving the human person that would require CPP approval according to French law, because it focused exclusively on the analysis of lice collected previously and there was no specific sampling for this study.

KDMC responded but expressed neither agreement nor disagreement with the editorial decision. AV, RR, PB, and DR either did not respond directly or could not be reached.



## OPEN ACCESS

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## References

1. Veracx A, Rivet R, McCoy KD, Brouqui P, Raoult D (2012) Evidence That Head and Body Lice on Homeless Persons Have the Same Genotype. *PLoS ONE* 7(9): e45903. <https://doi.org/10.1371/journal.pone.0045903> PMID: 23049889
2. The *PLOS ONE* Editors (2022) Expression of Concern: Evidence That Head and Body Lice on Homeless Persons Have the Same Genotype. *PLoS ONE* 17(12): e0278000. <https://doi.org/10.1371/journal.pone.0278000> PMID: 36512584
3. Benkouiten S, Badaïga S, Nappez C, Charrel R, Raoult D, Brouqui P (2012) Immunity to measles, diphtheria and tetanus in residents of homeless shelters in Marseilles, France. *Journal of Infection*, 66(2): 189–191. <https://doi.org/10.1016/j.jinf.2012.10.023> PMID: 23103286
4. Keita AK, Brouqui P, Badiaga S, Benkouiten S, Ratmanov P, Raoult D, et al. (2012). *Tropheryma whipplei* prevalence strongly suggests human transmission in homeless shelters. *International Journal of Infectious Diseases*, 17(1): 67–68. <https://doi.org/10.1016/j.ijid.2012.05.1033>

5. Badiaga S, Benkouiten S, Hajji H, Raoult D, Brouqui P (2012) Murine typhus in the homeless. *Comparative Immunology, Microbiology and Infectious Diseases*, 35(1): 39–43. <https://doi.org/10.1016/j.cimid.2011.09.008> PMID: 22093517
6. Thiberville SD, Salez N, Benkouiten S, Badiaga S, Charrel R, Brouqui P (2014) Respiratory viruses within homeless shelters in Marseille, France. *BMC Research Note*, 7, 81. <https://doi.org/10.1186/1756-0500-7-81> PMID: 24499605
7. Angelakis E, Rolain JM, Raoult D, Brouqui P (2011) *Bartonella quintana* in head louse nits. *FEMS Immunology & Medical Microbiology*, 62(2): 244–246. <https://doi.org/10.1111/j.1574-695X.2011.00804.x>
8. Drali R, Benkouiten S, Badiaga S, Bitam I, Rolain JM, Brouqui P (2012) Detection of a Knockdown Resistance Mutation Associated with Permethrin Resistance in the Body Louse *Pediculus humanus corporis* by Use of Melting Curve Analysis Genotyping. *Journal of Clinical Microbiology*, 50(7): 2229–2233. <https://doi.org/10.1128/jcm.00808-12> PMID: 22573588
9. American Society for Microbiology (2024) Retraction for Drali et al., “Detection of a Knockdown Resistance Mutation Associated with Permethrin Resistance in the Body Louse *Pediculus humanus corporis* by Use of Melting Curve Analysis Genotyping”. *Journal of Clinical Microbiology*, 62(2): e01505–23. <https://doi.org/10.1128/jcm.01505-23>
10. Drali R, Boutellis A, Raoult D, Rolain JM, Brouqui P (2013) Distinguishing Body Lice from Head Lice by Multiplex Real-Time PCR Analysis of the Phum\_PHUM540560 Gene. *PLoS ONE* 8(2): e58088. <https://doi.org/10.1371/journal.pone.0058088> PMID: 23469145
11. The PLOS ONE Editors (2022) Expression of Concern: Distinguishing Body Lice from Head Lice by Multiplex Real-Time PCR Analysis of the Phum\_PHUM540560 Gene. *PLoS ONE* 17(12): e0278004. <https://doi.org/10.1371/journal.pone.0278004> PMID: 36512552
12. Benkouiten S, Drali R, Badiaga S, Veracx A, Giorgi R, Raoult D, et al. (2014) Effect of Permethrin–Impregnated Underwear on Body Lice in Sheltered Homeless Persons: A Randomized Controlled Trial. *JAMA Dermatology*, 150(3): 273–279. <https://doi.org/10.1001/jamadermatol.2013.6398> PMID: 24305799
13. Drali R, Abi-Rached L, Boutellis A, Djossou F, Barker SC, Raoult D (2016) Host switching of human lice to new world monkeys in South America. *Infection, Genetics and Evolution*, 39: 225–231. <https://doi.org/10.1016/j.meegid.2016.02.008> PMID: 26867815
14. Ly TDA, Touré Y, Calloix C, Badiaga S, Raoult D, Tissot-Dupont H, et al. (2017) Changing Demographics and Prevalence of Body Lice among Homeless Persons, Marseille, France. *Emerging Infectious Diseases*, 23(11): 1894–1897. <https://doi.org/10.3201/eid2311.170516> PMID: 29048280
15. Ly TDA, Edouard S, Badiaga S, Tissot-Dupont H, Hoang VT, de Santi VP, et al. (2018) Epidemiology of respiratory pathogen carriage in the homeless population within two shelters in Marseille, France, 2015–2017: cross sectional 1-day surveys. *Clinical Microbiology and Infection*, 25(2): P249.E1–249.E6. <https://doi.org/10.1016/j.cmi.2018.04.032> PMID: 29777925
16. Ly TDA, Kerbaj J, Edouard S, Hoang VT, Louni M, Dao TL, et al. (2019) The Presence of *Acinetobacter baumannii* DNA on the Skin of Homeless People and Its Relationship With Body Lice Infestation. Preliminary Results. *Frontiers in Cellular and Infection Microbiology*, 9. <https://doi.org/10.3389/fcimb.2019.00086> PMID: 31024857
17. Ly TDA, Holi-Jamovski F, Hoang VT, Dao TL, Drancourt M, Gautret P. (2019) Preliminary Feasibility Study of Questionnaire-based Active Pulmonary Tuberculosis Screening in Marseille Sheltered Homeless People, Winter 2018. *Journal of Epidemiology and Global Health*, 9(2): 143–145. <https://doi.org/10.2991/jegh.k.190510.001> PMID: 31241873
18. Ly TDA, Hadjadj L, Hoang VT, Louni M, Dao TL, Badiaga S, et al. (2019). Low prevalence of resistance genes in sheltered homeless population in Marseille, France, 2014–2018. *Infection and Drug Resistance*, 12: 1139–1151. <https://doi.org/10.2147/IDR.S202048> PMID: 31123411
19. Ly TDA, Louni M, Hoang VT, Dao TL, Badiaga S, Brouqui P, et al. (2020) Epidemiological serosurvey of vector-borne and zoonotic pathogens among homeless people living in shelters in Marseille: cross-sectional one-day surveys (2005–2015). *European Journal of Clinical Microbiology & Infectious Diseases*, 39: 1663–1672. <https://doi.org/10.1007/s10096-020-03889-6> PMID: 32318966
20. Amanzougaghene N, Mediannikov O, Ly TDA, Gautret P, Davoust B, Fenollar F, et al. (2020) Molecular investigation and genetic diversity of *Pediculus* and *Pthirus* lice in France. *Parasites & Vectors*, 13: 177. <https://doi.org/10.1186/s13071-020-04036-y> PMID: 32264930
21. Ly TDA, Amanzougaghene N, Hoang VT, Dao TL, Louni M, Mediannikov O, et al. (2020) Molecular Evidence of Bacteria in Clothes Lice Collected from Homeless People Living in Shelters in Marseille. *Vector-Borne and Zoonotic Diseases*, 20(11): 872–874. <https://doi.org/10.1089/vbz.2019.2603> PMID: 32366193

22. Ly TDA, Hoang VT, Louni M, Dao TL, Badiaga S, Tissot-Dupont H, et al. (2020) Epidemiological sero-survey and molecular characterization of sexually transmitted infections among 1890 sheltered homeless people in Marseille: Cross-sectional one day-surveys (2000–2015). *Journal of Infection*, 82(1): 60–66. <https://doi.org/10.1016/j.jinf.2020.11.026> PMID: 33279534
23. Ly TDA, Dao TL, Goang VT, Braunstein D, Broqui P, Lagier JC, et al. (2020) Pattern of infections in French and migrant homeless hospitalised at Marseille infectious disease units, France: A retrospective study, 2017–2018. *Travel Medicine and Infectious Disease*, 26: 101768. <https://doi.org/10.1016/j.tmaid.2020.101768>
24. Ly TDA, Hadjadj L, Hoang VT, Goumbala N, Dao TL, Badiaga S, et al. (2021) Enteric pathogenic bacteria and resistance gene carriage in the homeless population in Marseille, France. *Acta Microbiologica et Immunologica Hungarica*, 68(1): 7–13. <https://doi.org/10.1556/030.2021.01346> PMID: 33512334
25. Ly TDA, Hoang VT, Goumballa N, Louni M, Canard N, Dao TL, et al. (2021) Variations in respiratory pathogen carriage among a homeless population in a shelter for men in Marseille, France, March–July 2020: cross-sectional 1-day surveys. *European Journal of Clinical Microbiology & Infectious Diseases*, 40: 1579–1582. <https://doi.org/10.1007/s10096-020-04127-9>
26. Ly TDA, Perieres L, Hoang VT, Dao TL, Gautret P (2021) Pneumococcal infections and homelessness. *Molecular Epidemiology*, 62(4). <https://doi.org/10.15167/2421-4248/jpmh2021.62.4.1805> PMID: 35603253
27. Ly TDA, Holi-Jamovski F, Hoang VT, Goumballa N, Louni M, Dao TL, et al. (2021) Screening Strategy of Active Pulmonary Tuberculosis in Sheltered Homeless People in Marseille, 2019. *Journal of Epidemiology and Global Health*, 11(1): 124–131. <https://doi.org/10.2991/jegh.k.201009.001> PMID: 33605113